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ABSTRACT

Past, present, and possible future government involvement in postsecondary education in British Columbia was analyzed. Special attention was paid to the following topics: challenges facing British Columbia's education system and the importance of postsecondary vocational education; issues in postsecondary education and adult education; the rationale for government intervention; current government intervention in the market and its effectiveness; policy options and goals; and possible policy alternatives (maintain the status quo, privatize, subsidize the private market, equalize, and rationalize). A set of policies was recommended to rationalize the existing system of postsecondary education by taking the following steps: continuing the substantial roles of the federal government and public education postsecondary education while working to increase interprovincial cooperation and a unified national approach coordinated at the federal level; significantly expanding the role of the private sector; facilitating bridge building between the public and private sectors; and withdrawing from those markets where private institutions would be able to provide educational services more efficiently than public institutions can. (A total of 15 recommendations to the provincial government, federal government, public institutions, and private training industry are included along with 18 tables/figures and 78 references.) (MN)

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A POLICY REVIEW OF

GOVERNMENT INTERVENTION IN

POST-SECONDARY VOCATIONAL EDUCATION

IN BRITISH COLUMBIA

by

Jim Cleveland

B.Sc., University of Waterloo, 1971

PROJECT SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION

in the Faculty

of

Business Administration

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ABSTRACT

Post-secondary vocational education plays an important part in the economy of British Columbia. The educational system prepares workers to meet the needs of employers, and to upgrade the skills needed for continuing employment success. Adults learn in a variety of formal and informal settings. Their learning needs demand flexibility and versatility in the educational system. This paper describes the many elements in this system, in both public and private sectors.

There is a significant private market for educational services in British Columbia. This paper takes the point of view that government should let an efficient market operate without interference. However, the private market for educational services is subject to failures which reduce its efficiency. The first failure is an asymmetry of information available to the consumer and the training provider. This allows institutions with a profit motive to act in an opportunistic way. The second failure results from the presence of positive externalities to the market. The market will produce a level of service which is less than socially optimal. Government policies are directed at correcting these failures, and at achieving equity in access to training and employment.

Government intervenes by regulating the market, influencing the market, producing services directly, and contracting out services. Each intervention has its own limitations and costs. Some government policies create their own secondary problems. The paper describes a number of alternate policies which are intended to remedy the identified problems and distributional concerns.

The paper suggests that government should have four clusters of goals in mind as educational policy is developed. These are efficiency goals, distributional goals, budgetary goals and political goals. The paper outlines five scenarios in which a variety of government policies interact, and estimates their impact on these goals.

It is recommended that federal and provincial governments, public institutions and private institutions adopt policies which will provide a co-ordinated approach to developing an efficient, equitable, and practical resolution to concerns about the educational system in British Columbia.

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1.0 INTRODUCTION

1.1 The Purpose of this Analysis

The purpose of this analysis is to examine the involvement of government in post-secondary vocational education and to discuss a number of underlying issues. The paper will explain the rationale for government intervention in the private market, and examine the effectiveness of current policies. It will also identify alternatives for government, evaluate these alternatives and make recommendations for the direction of future policies.

1.2 Issues Addressed in this Paper

The British Columbia Government has a mandate to ensure that the province's education system is meeting the needs of society for efficient and accessible training opportunities. This mandate is carried out by two ministries: the Ministry of Education and the Ministry of Skills, Training and Labour. The Ministry of Education is responsible for the elementary and secondary school systems. The Ministry of Skills, Training and Labour is responsible for the post-secondary education system. Together, the two ministries must ensure that the education system prepares students to perform productive roles in society and in the province's labour force.

This paper will address issues related to one specific mandate of the Ministry of Skills, Training and Labour: to ensure that there is an efficient and equitable vocational education system in the province. These issues are important to the well-being of all British Columbians for the following reasons. Our collective prosperity is affected by the

productivity of the labour force, the competitiveness of our industry, and the level of taxation required to support the training infrastructure. Our young people need effective preparation for work, since their future economic well-being will depend on the marketability of their skills. People already in the labour force need skills upgrading when their employment is threatened by technological changes. Employers require a steady supply of workers with the ability to add value in the work place. Finally, taxpayers need to know that their tax dollars are being well spent, and that society will benefit from educational investments.

The provincial government is responsible for educational services delivered by institutions in both the public and private sectors. The efforts of both sectors are critical to the overall success of the education system. In addition, the federal government is involved in financing and delivering training programs in the province. This paper will recognize the contribution of the various elements of the post-secondary vocational educational system and make recommendations to the provincial and federal governments, and to the public and private institutions.

1.3 Challenges Facing British Columbia's Education System

The education system faces a significant challenge resulting from the changing economy and demographic makeup of the province. The system must respond to the social and labour market changes unfolding in British Columbia, and around the world. The *Background Paper for the Premier's Summit on Skills Development and Training* states:

> It is clear we are living in a period of profound change, and that social, economic and political systems are being transformed across the globe. In the last decade, international investment and trade patterns, demographic trends, environmental pressures, and the introduction of new technologies have all contributed to a reshaping of our economy and our labour market. (British Columbia 1993a, p. 9)

These developments force us to re-examine our priorities if we are to prosper in the 21st century. In the last century, British Columbians benefited from harvesting and exporting our abundant natural resources. Today, we face limits on the benefits we can derive from this traditional economic strength. Environmental concerns and native land claims restrict access to raw materials. International competition is increasing in the markets for these exports (British Columbia 1990, p. 3).

In the next century, our economic success will depend on our ability to compete in an information-based, global marketplace (British Columbia 1991c, p. 1). The productivity of our work force must compare favourably to that of other developed (and developing) countries if we are to maintain our standard of living. We will face new competitors as trade barriers fall and new markets open to our products. The British Columbia Human Resources Development Project (HRDP) Steering Committee identified the need for "a highly skilled, adaptable, and more autonomous work force" (British Columbia 1992, p. 10). We need an education system that will develop such a work force, so that we remain competitive in this new environment.

The demographics of the province are also changing. British Columbia has a high level of immigration and a net in-migration from other provinces. The population growth rate for British Columbia (at 2.6% in 1994) is over twice the national rate (Vancouver

Board of Trade 1995). Many new citizens have language and literacy limitations that make traditional vocational programs impractical or ineffective. The report, *Forces of Change Influencing Education and Training* (British Columbia 1991a) predicts a 20% population growth in the next 10 years. It describes an ageing work force, and a need to provide retraining for the skills required in the future.

The 1993 Premier's Summit on Skills Development and Training examined social and economic trends in the province. The Background Paper for the Summit suggests three challenges for the education system:

> It must provide a supply of highly skilled, continuously learning workers who are able to work effectively in the new economy of the 21st Century. It must train and equip for employment workers who have not acquired basic skills or whose skills have become obsolete. And it must provide all British Columbians with equitable and continuing access to relevant learning and training opportunities (British Columbia 1993a, p. 15).

The education system in British Columbia faces a further challenge: it must respond to the changing role of the federal government in vocational training. In recent years, the cash transfers portion of the federal contribution to post-secondary education has been decreasing as a percentage of educational expenditures (Canada 1994c, pp. 61-62). The Federal government has now expressed a willingness to transfer its job training programs to the provinces. It has also announced a change in the educational funding formula between the two levels of government. The new approach will replace the major transfers to provinces[1] with a single Canada Health and Social Transfer payment in the

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1 These are the Canada Assistance Plan and Established Programs Financing (including Health and Post-Secondary Education).

1996-97 fiscal year (Martin 1995, p. 12). The total amount of the transfer payments will decrease substantially. The provincial government will assume increased administrative and fiscal responsibility for meeting the learning needs of the people of British Columbia.

The implementation of the Canada Health and Social Transfer payment will result in two significant changes. It will represent a reduced level of federal funding of social programs. It will also give British Columbia increased control over the distribution of funds among the three social program areas: health, education, and social assistance.[2] This will place an additional burden on those responsible for educational policies. The two ministries will need to evaluate every program for its relevance and efficiency. The benefits of each educational expenditure will need to be weighed against the benefits of alternate uses of the funds in health and social welfare areas.

1.4 Concerns about the Education System

How well prepared is our education system to meet the economic, demographic and fiscal challenges? This section will outline concerns about, and criticisms of, the education system.

Employers have suggested that educational institutions do not prepare students for the demands of the work place. The Canadian Federation of Independent Business (CFIB 1993) recently asked its member businesses the following question, "How satisfied are you with the job the (following) educational institutions are doing in preparing workers

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2 Some restriction, such as those in the Canada Health Act, will continue.

for employment in your firm?" As Table 1.1 shows, only 49.8% of employers are satisfied with the work public colleges and universities are doing. The table shows a higher satisfaction with the results of trade and technical schools (61.6% satisfied) and of private training institutions (65% satisfied).

Table 1.1

Degree Of Satisfaction With Various Institutions

	Elementary Schools	High Schools	Colleges	Universities	Trade and Technical Schools	Private Training Institutions
% Satisfied	36.3	29.8	49.8	49.8	61.6	65.0
% Dissatisfied	63.7	70.2	50.2	50.2	38.4	35.0

source: CFIB 1993

A survey of employers in the software industry echoed this criticism, "Frequent mentions were that the education system did not meet the needs of employers" (Canada 1992, p. 71). The report concludes that "these problems have serious implications for, and can only be addressed through concerted efforts by, a number of stakeholder groups: workers, employers, policymakers, and educators" (Canada 1992, p. 93).

The educational community has expressed concern as well. Witter (1992, p. 6) criticizes government policies, citing "program duplication, poor articulation, competing and overlapping programs, chronic funding problems, and inadequate national standards." An analysis completed by the Centre for Policy Studies in Education (UBC) identifies increasing inequity as an issue, "The dream of a Learning Society is rapidly becoming a reality for the well-educated few, but remains beyond the expectations of large segments of British Columbia's population." The review concludes that there remains a substantial

number of British Columbians "whose educational attainment will make it increasingly difficult for them to compete in the labour market" (Rubenson and Willms 1993, p. 28).

Recent reports to government have also been discouraging. They indicate the need for significant change in all levels of the system, from elementary school to higher education. In 1988, the Sullivan Royal Commission (Sullivan 1988) made 83 recommendations for change, in areas including curriculum and assessment. The Commission found that the primary and secondary school systems did well at preparing students to go on to post-secondary education. It noted, however, that the majority of students would not go to college or university. The Commission lamented the high dropout rate of secondary students and suggested that alternative program strategies were needed.

In 1990, the Ministry of Education's report *Year 2000: a framework for learning* (British Columbia 1990) responded to public concern that the primary and secondary school systems were not adequately preparing children and young adults for the demands of the new economic reality. It recommended changes to ensure that all students develop the basic skills required for further education and employment.[3] The report concluded that the system must adapt to the "dramatic social and economic changes that have taken place in British Columbia over the past 20 years" (British Columbia 1990, p. 2).

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[3] Educational reform is a complex and controversial process. Many of the changes arising from the Sullivan Commission and Year 2000 reports have not been successfully implemented. In particular, they were criticized for a de-emphasise of quantitative evaluation procedures. Parents and traditional educators were concerned about inadequate development of fundamental academic skills within the proposed programs. In 1993, Premier of British Columbia suggested the *Year 2000* program had "failed the grade" and promised back-to-the-basics reforms (Balcom 1995).

A number of reports to government have concentrated on improvements to labour market development and training. In 1992, the British Columbia Task Force on Employment and Training released its report, *The Way Ahead for British Columbians* (The Strand Report). It recommended a new approach to labour market programs, with the establishment of a permanent, cross-sectoral Council on Training and Employment (British Columbia 1991b). The recommendations of the Task Force were directed at comprehensive, accessible and client-centred programs and at the involvement of all partners, including employers, in the formation of policy. The British Columbia Human Resources Development Project attempted to identify the strategic issues by a broad-based consultative process. The *Report of the Steering Committee* made wide-ranging recommendations for the future direction of post-secondary education. The *Report* identified seven interrelated characteristics of a learning system for British Columbia: accessibility, equity, quality, responsiveness, comprehensiveness, accountability and affordability (British Columbia 1992, p. i).

In 1992, the Ministry of Advanced Education, Training and Technology released the report, *Participation in Adult Education in British Columbia* (Rubenson 1992). It concluded that "Greater investments and new strategies are needed from both the federal and provincial levels of government as well as from the private sector" (Rubenson 1992, p. 30).

The British Columbia Labour Force Development Board continues the study of this important area. The Board will focus its advice to government on 1) setting broad directions for funders, providers and learners and 2) establishing accountability to ensure

successful outcomes. Its first working paper, *Training for What?*, sets its priority as addressing the "economic and social urgency to the skills imperative which should place it at the forefront of public social policy" (British Columbia 1995a, p. 1).

In a recent article, Greenspon (1995b, p. A1) quotes a federal government report, "Despite the current consensus that skill investment is the touchstone for economic salvation, the record suggests we must either abandon this strategy for displaced workers or else ensure that it works considerably better." Clearly, there is a lack of confidence that we are on the right track with vocational education programs.

1.5 The Importance of Post-Secondary Vocational Education

The relationship between post-secondary credentials and employment opportunity is well established. Little (1995, p. A1) writes, "A new iron law is taking over in the work place. If you have completed some form of post-secondary education - a university degree, a community college diploma, a training certificate - you're going to get a job. If you have anything less, you won't." Little continues, "From 1990 to 1994, the economy created about 957,000 jobs for people with that essential piece of paper attesting to their post-secondary school achievements. At the same time, it destroyed 830,00 jobs for people with anything less."

Human Resources Development Canada (Canada 1994e, p. 10) argues that there is clear evidence that the job market has been undergoing a "revolution of rising skills." Table 1.2 summarizes Statistics Canada figures for employment in British Columbia in 1993.

Table 1.2

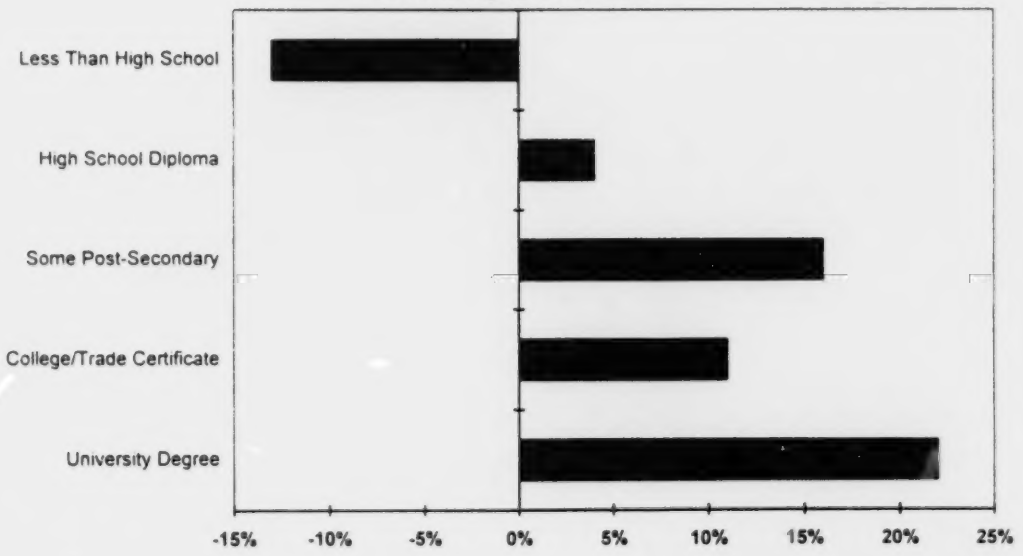
Change in Number of Jobs in British Columbia, 1993

EDUCATION LEVEL	INCREASE IN NUMBER OF JOBS	PER CENT CHANGE
University Degree	45,000	22%
College Diploma or Trade Certificate	41,000	11%
Some Post-Secondary Education	28,000	16%
High School Diploma	16,000	4%
Less than High School Diploma	**-38,000**	**-13%**

source: Canada 1994e, p. 10

Figure 1.1 illustrates these changes in employment distribution. While there was an increase in the number of jobs in British Columbia between 1990 and 1993, those with less than high school education actually lost ground. Prior completion of any post-secondary training enhanced a worker's employment prospects.

Figure 1.1
Employment by Education Level
Percent Change, B.C., 1990-1993



source: Canada 1994e, p. 10

The *Economic Review* (Canada 1994e, p. 11) also reports that the 1991 Canadian Census shows that employment income increases with educational attainment. Table 1.3. summarizes this trend in earnings.

Table 1.3

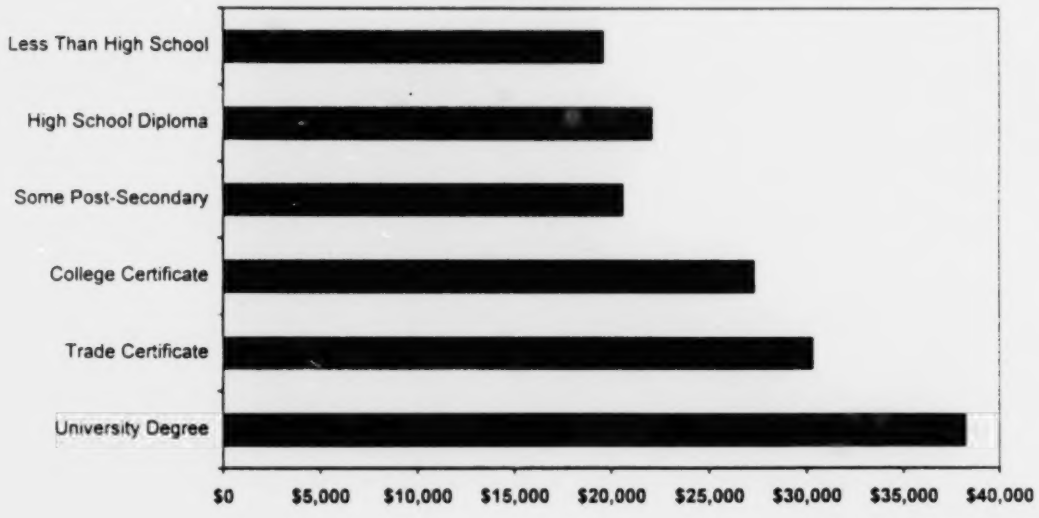
Average Income by Educational Attainment, 1993

EDUCATION LEVEL	AVERAGE ANNUAL INCOME
University Degree	$38,200
Trade Certificate	$30,300
College Certificate or Diploma	$27,300
Incomplete Post-Secondary Education	$20,600
High School Diploma	$22,100
Less than High School Diploma	$19,600

source: Canada 1994e, p. 10

Figure 1.2 illustrates the consistent advantage of increasing educational attainment on the income level of a worker.

Figure 1.2
Employment Income by Education Level
B.C., 1991



source: Canada 1994e, p. 11

The polarization of employment and income rates between the educated and relatively uneducated is likely to increase. As Brown (1995, p. 37) says, "The labour markets of most advanced industrialized economies are exhibiting important basic changes - namely, a decreasing demand for lower-skilled workers and, consequently, reduced labour market prospects for them." The indications are clear: the well-paying jobs created in the new economy will go to those with adequate and appropriate training. Those with skill deficits will earn less money and have a harder time finding work.

1.6 The Approach of this Paper

This paper will analyze the policies of the British Columbia Government in the area of post-secondary vocational education, as implemented by the Ministry of Skills, Training and Labour. It will follow a model suggested by economic theory. This model assumes that a market that operates efficiently should be left alone unless there are distributional concerns. The first step in the analysis, performed in Chapter 2, is to determine if a market does exist. If so, and there are failures in the market (or distributional goals), then government intervention is warranted. The remaining task is to determine if the government intervention is itself efficient, or if it could be improved through a different set of policies.[4] The paper will conclude by making recommendations to government and to training providers.

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4 This approach is described in detail in Weimer and Vining 1992, pp. 208-210.

2.0 POST-SECONDARY VOCATIONAL EDUCATION

This chapter will outline the many ways in which adults seek to develop the skills necessary for success in the work place. It will begin with a description of the broad field of adult education, then provide more detail about post-secondary vocational education, the segment to be addressed in this paper.

2.1 The Field of Adult Education

The field of adult education can be quite broadly defined to include all non-compulsory learning activities. Selman and Dampier (1991, p. 15) suggest that there are four categories of adult education from the learner's point of view:

1. **vocational education** - related to the knowledge and skills to perform a job;
2. **social education** - related to the individual's social roles as family member, social group member, and citizen;
3. **recreational education** - related to recreational activities and fields of interest; and,
4. **self-development education** - related to the goals of liberal education.[5]

Selman and Dampier (1991) continue, "The enterprise of adult education, like any social practice, responds to the nature of the society within which it is functioning" (p. 35). Since the Second World War, there has been significant public support for

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5 Liberal education involves "learning how to think critically, express oneself, broaden one's horizons. Feelings about oneself, others and the ultimate values in life may be said to fall into this category as well" (Selman and Dampier 1991 p. 15).

expanding the opportunities for adults to engage in *lifelong learning*.[6] Throughout the latter half of this century, governments have become more directly involved in providing these opportunities. In the 1950's and 1960's, significant levels of public funding were devoted to developing the infrastructure for delivering adult education programs across the country. Universities and technical institutes were expanded and community colleges were opened. Adult education gained respect as a profession and, in 1957, the University of British Columbia became the first university to offer a full Adult Education degree program in Canada (Selman and Dampier 1991, p. 68). Since that time, publicly funded programs have addressed all four categories of adult education: vocational, social, recreational, and self-development.

2.2 *Post-Secondary Vocational Education*

Vocational education is only one part of the field of adult education, and can be defined by its relationship to employment: it is education and training[7] intended to develop and improve skills for earning a living. For many people, a period of vocational education comes before employment. For others, an upgrading of existing skills is necessary to remain employable, or make progress in their careers. There is no single source for post-secondary vocational education. The British Columbia HRD Project

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6 The concept of lifelong learning reflects the perception of adult education as a never-ending process (Selman and Dampier 1991, p. 6).

7 There is a scholarly debate about the need to differentiate between the terms "vocational education" and "vocational training." Hager and Laurent (1990, pp. 53-60) suggest there is no longer a useful distinction. McKenzie (1995, p. 35) argues that, while there is increasing sophistication in modern training, the term "education" should be reserved for a "broader, 'liberal' concept." This paper will reflect this distinction, while acknowledging some inconsistency in the literature.

identified a number of components, including foundation education, apprenticeship, workplace training, applied studies, and informal learning (British Columbia 1991c, p. 1).

2.3 *Participation in Post-Secondary Vocational Education*

There are many educational services available to the adult learner in British Columbia. According to the Human Resources Development Project, about 1,300,000 people, or 55% of the population, were involved in education, training, retraining, upgrading, and work force development activity in 1990-1991 (British Columbia 1992, p. 84). Table 2.1 summarizes their participation, and indicates full-time and part-time attendance.

Table 2.1

Extent of Adult Learning in British Columbia

A Summary Estimate 1990-1991

	FULL TIME	PART TIME	TOTAL
Apprenticeship		14,000	14,000
Colleges / Institutes	43,000	343,000	386,000
Universities	40,000	107,000	147,000
Open Learning Agency		22,000	22,000
Private Sector Institutions			60,000
School Districts		28,000	28,000
Workplace Training*			643,000
Community Organizations ^			
Total			1,300,000

* based on Canadian Labour Market Productivity Centre 1990 survey

^ no information available at this time

source: British Columbia 1992, p.84

Apprenticeships: In 1991, there were more than 14,000 registered apprentices in 125 different trades in this province. Apprenticeship program lengths range from 2 years (e.g., hairdressing) to 4 years (e.g., heavy duty mechanic). Training includes on-the-job experience and formal training, which is provided by industry organizations and at public colleges and institutes.

Public Post-Secondary Colleges and Institutes: The British Columbia Government operates sixteen community colleges and four technical training institutes with over 80 branches throughout the province. There is a very high participation rate (nearly 400,000 people) and a high proportion of part-time attendance. Community colleges offer academic studies, career/technical training, vocational education, adult basic education, English as a Second Language, and continuing education. They also offer transfer programs recognized by British Columbia's universities. Technical institutes offer programs in technologies and trades, art and design, law enforcement and public safety, and marine training.

Universities: B.C.'s four universities provide liberal education as well as vocational education. They offer a variety of undergraduate, graduate, and doctoral programs. Some students prepare for professional careers in fields such as medicine, music, law and engineering. There were nearly 150,000 students in attendance at universities in 1991.

Open Learning Agency: The Open Learning Agency provides learning opportunities through the Open University, the Open College, and the Knowledge Network. Courses are offered through a variety of modes including independent study, telecourses, and classroom-based instruction. Participation was estimated at 22,000 people in 1991.

The Private Vocational Training Industry: The HRD Project estimates that in 1990-1991, 60,000 British Columbians received vocational training from private companies in this province. Their estimate is drawn from the 450 institutions registered at that time. Due to a change in legislation,[8] current registration is much higher (Dillon 1995, p. 1). Table 2.1, therefore, understates participation in this category.

Privately owned companies were offering vocational training at the turn of the century, pre-dating the public community colleges by 50 years. Since 1992, they have been required to register with the Private Post-Secondary Education Commission (PPSEC). The Commission has registered over 900 individuals, non-profit organizations, and for-profit institutions that provide post-secondary education in British Columbia.

Table 2.2 summarizes the types of programs offered by registered private institutions (PPSEC 1994a , p. 8) in 1994. More recent registrants are not included. The table shows that training in the areas of compt ers and business, job entry and life skills, and trades and technology predominate. The Commission's records also indicate that the largest growth is in the number of institutions offering job entry, life skills, and health care programs (PPSEC 1994a, p. 7).

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[8] The Private Post-Secondary Education Act was enacted in 1990.

Table 2.2

Main Programs of Study - Registered Private Institutions in B.C.

March 31, 1994

PROGRAM OF STUDIES	MARCH 31/94	PERCENTAGE
Academic/General Interest	30	3.7
Arts	25	3.1
Computer & Business	169	21.0
Health Care	79	9.8
Hospitality & Tourism	29	3.6
Job Entry/Life Skills	144	17.9
Language Schools	70	8.7
Miscellaneous	32	4.0
Native Schools	43	5.3
Personal Grooming	76	9.4
Trades & Technology	109	13.5
Total	806	100

source: PPSEC 1994a, p. 8

School Districts: British Columbia's 75 school districts offer adult secondary school completion courses, General Educational Development (GED)[9] preparation courses, English as a Second Language courses and continuing education. Many schools are open in the evenings to accommodate workers who wish to upgrade their skills. Participation by adults was about 28,000 in 1991.

Workplace Training: It is difficult to estimate the extent of formal and informal training carried on in the work place. The HRD Project draws on data from a 1989 survey conducted by the Canadian Labour Market Productivity Centre to estimate the number of workers involved in training. The authors comment that there is no general agreement on

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[9] The GED test is given by the GED Testing Service of the American Council of Education for adults who did not graduate from high school.

what constitutes workplace training. The participation level of 643,000 people per year in Table 2.1 is therefore only an estimate, but training supported by employers is certainly a significant element of the vocational education system.

Community Organizations: The HRD Project was unable to access data on the extent of training offered by community organizations, which were not required to register with the provincial ministry prior to 1992. These organizations are included in the expanded registration undertaken by the Private Post-Secondary Education Commission. Many of these organizations are non-profit societies, which may offer training as one of several services. Some agencies serve the groups designated as employment equity targets by the federal government: visible minorities, First Nations people, disabled people, and women.

3.0 ISSUES IN POST-SECONDARY EDUCATION

This chapter will examine several issues that are relevant to the analysis of government policy in post-secondary vocational education. Section 3.1 will look at the nature of adult learners and the challenges they present to educators. Section 3.2 will clarify the relationship between the federal and provincial levels of government in education. Section 3.3 will describe the fiscal situation affecting all government policy decisions in Canada at this time.

3.1 The Adult Learner

Adult education is a process that continues over time and takes place in a variety of settings. This is equally true in the vocational education segment. The skills which may be applied in the work place are developed in a range of formal and informal learning situations, whether in an educational institution, on-the-job or at home. Adults may engage in full-time or part-time learning activities, with a teacher or on their own. The challenge for the education system is to recognize, evaluate and give credit for this learning.

The adult learner brings unique contributions and needs to the learning situation. Brundage and Mackeracher (1980, p. 102) write, "Adults enter the learning activities with an organized set of descriptions and feelings about themselves which influence their learning process. These meanings, values, and strategies will determine how the individual will interpret new experiences and how he will learn." The education system

must use a range of learning modalities, in a variety of settings, to accommodate a diversity of learning styles. A traditional classroom setting, with teacher-to-learner delivery, will not be effective for all adults.

Adults have a variety of commitments and conflicting priorities. Brundage and Mackeracher (1980, pp. 103-109) comment, "Adults are highly motivated to learn in areas relevant to their current developmental tasks, social roles, life crises, and transitional periods. They are often reluctant to engage in learning programs which appear to 'waste their time' because the content or processes do not have an immediate and pragmatic application within their life." A final challenge for the education system is to keep vocational training activities relevant to the work place, and to minimize extraneous or redundant demands on students in this area.

3.2 Federal Government Involvement in Post-Secondary Education

As explained in Section 1.3, the federal government makes a financial contribution to post-secondary education in the province. The Government of Canada also supports a student loans program to encourage financial institutions to assist students in financing their own training. In addition, Human Resources Development Canada gives financial support to individuals in employment-related training. The Employability Improvement Program[10] purchases seats in public institutions, and, to a lesser extent, from private sector training providers (both non-profit and for-profit).

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[10] EIP includes Canadian Jobs Strategy and other strategies.

Education is designated a provincial responsibility in the Canadian Constitution. However, the federal government is responsible for the education of certain groups, such as First Nations people, residents of the Northern Territories, members of the armed forces, and inmates of penal institutions. Agreements with the provinces have led to a further federal role in language and citizenship training for immigrants, bilingualism education for civil servants, rehabilitation of disabled persons, and direct assistance to selected groups, such as older persons (Selman and Dampier 1991, p. 57). In recent years, federal activity has centred more around training of Unemployment Insurance recipients.

The federal government also provides assistance to the provinces in financing post-secondary education. This is accomplished by direct contribution of funds and by the transfer of taxation points.[11] Post-secondary education transfers to the provinces were about $6 billion in 1995. As Table 3.1 shows, total assistance has been increasing (from $6.1 billion in 1993-4 to $6.2 billion in 1995-6), but the cash transfer portion has been decreasing (from $2.4 billion in 1993-4 to $2.1 billion in 1995-6). The funding formula will change in 1996-97 with the introduction of the Canada Health and Social Transfer payment.

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11 Taxation points denote the right to collect tax revenues. The transfer of taxation points allows the province to collect revenue that the Government of Canada would otherwise collect.

Table 3.1

Established Program Financing - Post-Secondary Education

Millions of Dollars

	1993-94	1994-95	1995-96
Post-Secondary Education	6,108	6,177	6,238
Of which:			
Tax point transfer	3,697	3,848	4,124
Cash transfers	2,411	2,329	2,144

source: Canada 1994b, p. 76

Until the late 1960s, the federal government exercised influence over provincial policies in education through the provision of matching grants for desired programs. It assumed a more direct role in the provision of adult occupational training with legislation enacted in 1967[12] (Selman and Dampier 1991, p. 57).

Expansion of federal activity led to concern about overlapping responsibilities for education and training. In 1977, the Commission on Vocational, Technical, and Trades Training in British Columbia wrote,

> The role of the federal government in vocational training is generally not well understood. Through Canada Manpower training programs, client groups are created or manipulated in ways that are not always in the best interests of the individuals nor consistent with provincial priorities. (British Columbia 1977, p. 28)

Changes in federal priorities have added to the confusion, especially in the areas of adult basic education (ABE) and English/French as a Second Language (ESL/FSL). Early federal involvement in vocational training led to the identification of a need for ABE and ESL/FSL programs. Significant numbers of individuals lacked the prerequisite

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[12] Enactment of the Occupational Training Act (OTA) followed the introduction of the Canadian government's 'War on Poverty' (Selman and Dampier 1991, p. 57).

language, literacy and numeracy skills to participate in the training programs. The federal government responded by funding 'NewStart' corporations in six of ten provinces in the late 1960's. Later budget cuts forced a decrease in federal funding in these program areas. Selman and Dampier (1991, p. 58) suggest that the provinces responded 'unevenly' to the challenge of funding these important initiatives.

In the field of adult vocational education, there is some duplication of services by the two levels of government. In British Columbia, for instance, both governments fund training programs to assist Income Assistance recipients to become employed. The provincial government has recently introduced the *Skills Now* program and the federal government continues to fund *Canadian Jobs Strategy* projects for the same target group. There are administrative and overhead costs incurred by both governments in managing these programs.

There is some continuing support for the involvement of the federal government in vocational education. There is a recognition that federal initiatives have stimulated the growth of adult education generally, and of services to special target groups (Selman and Dampier 1991, p. 68). Richards (1994, p. 84) writes, "In the case of post-secondary education, the externalities attendant upon educating a mobile population justify a measure of federal financing A recent public opinion study indicates that Canadians want to see a continuing role for the federal government in education and employment. Greenspon (1995a, p. A6) wrote in the *Globe and Mail*, "The public's top priority for federal activity is education." The related concerns of unemployment and job creation were also among the top priority areas. The study asked respondents to rate appropriate

future roles for government, and the area of 'full employment' ranked second.[13] Table 3.2 summarizes the public's ranking of priorities for the federal government and appropriate future roles of government. It clearly indicates the high priorities placed on education and employment.

Table 3.2

Public Opinion of Government Priorities (Canada)

HIGH PRIORITIES	APPROPRIATE FUTURE ROLES
Education	Protect from crime and abuse
Debt and deficit	**Full employment**
Job creation	Model to world
Crime and justice	Plan for future generations
Child poverty	Work in partnership
Unemployment	Financial standard of living
Job training for youth	Quality of life
Job training	Promote tolerance
Taxation	Promote fair market price
Rich/poor gap	Referee (same rules)
Gun control	Minimal presence
Science and technology	Guardian of public wealth
Consumer protection	Demonstrate values

source: Greenspon 1995a

Public opinion, however, may not be sufficient to overcome the trends emerging in the current federal government review of social policy programs. A recent article by Greenspon (1995b, pp. A1, A6) suggests that the Human Resources Development Minister, Lloyd Axworthy, is concerned about the effectiveness and efficiency of past federal training programs.

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13 "Protection from crime and abuse" ranked first.

3.3 *Fiscal Concerns Affecting Adult Education*

The Government of Canada is down-sizing many of its programs in an effort to address the increasing national debt. In some program areas, the very need for government involvement is being questioned. The Department of Finance (Canada 1994b, p. 39) sets out six guidelines for assessing the role of federal programs and policies:

1. Public Interest Test: Does the program area or activity serve a public interest?
2. Role of government test: Is there a legitimate and necessary role for government in this area or activity?
3. Federalism test: Is the current role of the federal government appropriate, or should the program be devolved to the provinces?
4. Partnership test: What activities or programs should or could be transferred in whole or in part to the private or voluntary sector?
5. Efficiency test: If the program is to continue, how could its efficiency be improved?
6. Affordability test: Is the program affordable in light of the current fiscal situation?

The federal finance minister, Paul Martin, summarized this approach in a recent speech to the Vancouver Board of Trade. Martin said, "Government should do only what government does best, and leave the rest to those who can do it better."[14]

It has been suggested that employers and consumers should bear a greater proportion of the cost of vocational training programs. The Government of Canada is moving in this direction. Clients of Canada Employment Centres, who would have

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14 The Hon. Paul Martin spoke to the Vancouver Board of Trade on March 9, 1995.

recently received training free of cost under The National Training Act, are now being asked to pay 25-40% of their tuition costs. The Government of British Columbia will also be under increasing pressure to contain the costs of its training programs, and to justify the distribution of those costs.

The field of post-secondary education is a complex one. The nature of the adult learner requires a variety of learning interventions. The public demands a high level of service in this important area. There are overlapping responsibilities between federal and provincial levels of government, creating a risk of duplications and inefficiencies. The two governments face fiscal challenges which make it imperative to examine their involvement in all social programs. In Chapter 4, we will ask the question, "Should government be involved in post-secondary education at all?"

4.0 RATIONALE FOR GOVERNMENT INTERVENTION

The importance of effective vocational skills training to the people of British Columbia was described in Section 1.5. The relationship of credentials to economic well-being is well established. We cannot assume a corresponding need for government intervention without considering the private market for training services. In British Columbia, this market includes services provided by individual trainers, private vocational training institutions, and non-governmental agencies. As shown in Section 2.3, over 900 organizations and individuals in British Columbia offer a wide range of training services to the public, and operate on a for-profit or non-profit basis. If these private organizations can effectively meet society's needs for training, then government would be well advised to let the market operate without interference. However, if the market fails to operate in a socially beneficial way, government intervention is justified (Weimer and Vining 1992, pp. 207-210). This chapter will look at the operation of the private market for educational services and seek to determine if there are valid reasons for government to be involved.

4.1 Could the Private Market Operate Effectively?

Much of the public concern about the private market for educational services centres around various forms of opportunism among the profit-making firms. There is a suspicion that, in an effort to increase profits, owners of private institutions may mislead prospective students, or fail to deliver promised services.

Economic theory may provide an understanding of the basis of this suspicion. Before looking at problems in the market, it may be helpful to imagine what an efficiently operating market for training services would look like. Such a market would be characterized by *perfect competition*.[15] Sellers and buyers would interact to set a market price for each service, determined by supply and demand forces. Training providers would freely enter and withdraw from the market, and would attempt to maximize their profitability. Consumers would make purchasing decisions based on full access to information about the services offered, and would attempt to maximize their personal benefit.[16] All of the benefits of a transaction would be captured by the buyer and seller. The sum of all transactions in the market would achieve a state where no one could be made better off without someone else suffering a loss.[17] A market operating under these conditions is said to be *efficient*. Failure of an unregulated market to achieve efficiency presents a rationale for government intervention. Conversely, any government intervention should be justified by an increase in efficiency, or on the basis of some other desired social objective.

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15 The concept of *perfect competition* is drawn from economic theory. Emery (1984, pp. 152-153) lists seven assumptions in the theory: 1. there are many buyers and sellers; 2. products are homogeneous among sellers; 3. buyers and sellers have complete information; 4. market entry and exit are free of impediment; 5. firms aim to maximize profits; 6. consumers aim to maximize utility; 7. there are no third-party costs or benefits.

16 Termed *utility*, personal benefit in this context is the net benefit the consumer will derive from engaging in a training program. It is the difference between future benefits (such as wage increases) and costs (such as tuition and lost wages) incurred during the training period.

17 This state is known as *pareto efficiency*: the sum of the utilities of all parties is at a maximum. No redistribution would achieve a higher sum of utilities, although individuals could be better or worse off (Weimer and Vining 1992, p. 31).

4.2 *Problems with the Private Market - Efficiency*

Markets are said to 'fail' when they do not achieve efficiency in the absence of government intervention. There are two primary reasons why the market for educational services may fail. These arise from the nature of the service and the nature of the transaction between buyers and sellers. Market failures are associated with the existence of *information asymmetry* and *positive externalities*.

4.2.1 Information Asymmetry

It may be very difficult for a consumer of educational services to make an informed judgement about the quality of the training offered. The content knowledge of instructors, their teaching effectiveness, and the adequacy of equipment may be difficult to assess. Thus, at the point of purchase, the consumer may pay too much for the service. This difficulty is made more acute because the delivery of the training service has the quality of an *experience good*.[18] It is not until the training program has begun (presumably with a contract already in place) that the student can begin to evaluate the quality of delivery.

Taking this one step further, the consumer may not be able to fully assess the effectiveness of the training program until well after graduation. This gives the service the quality of a *post-experience good*.[19] Training providers may have information about

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18 An experience good is one which consumers can evaluate only after consumption has begun. (Weimer and Vining 1992, p. 71)

19 A post-experience good is one that is difficult to evaluate even after consumption has begun. (Weimer and Vining 1992, p.71)

the employment potential of the field, or about how current and relevant their curriculum is, but may fail to share that information. It is only after the graduate has spent some time in job search or in the workplace that inadequate or irrelevant curricula may become evident.

Even if the above information can be obtained, the consumer may decide not to conduct the necessary research prior to purchase. This would be a rational decision if the costs (time and money) of conducting the research exceed the perceived risk associated with the choice (Weimer and Vining 1992). There are a number of risk factors affecting employability, including the state of the economy, fluctuating labour market demand, and personal qualities of the worker. The contribution of the reputation of the institution, and the quality of the program offered, may not be evident. Therefore, the consumer may not realize the importance of researching the differences between training programs or institutions. Similarly, he or she may assume a level of expertise and honesty in the institution's admission process, and, therefore, be disinclined to invest time and energy in investigating their claims.

Another factor which is difficult for the consumer to evaluate is the financial security of the private institution. Companies are not required to release financial reports unless they are publicly traded. If an institution runs into financial problems and is unable to complete a training program, students may find that they have little to show for their investment. Transferability of credits between training institutions is imperfect, and a comparable course may not even be available elsewhere.

The issue of information asymmetry should be distinguished from the difficulty of forecasting the needs of the labour market. Predictions of future employment are based on extrapolations of past trends, and are, therefore, of limited reliability. Institutions and consumers have similar difficulty in predicting how the labour market will evolve. Since there is no asymmetry associated with the incomplete information, there is no market failure - and no rationale for government intervention.

In summary, the private market for educational services will fail to achieve efficiency due to the presence of information asymmetry. Consumers will not have access to complete information and will, therefore, be unable to maximize their utility.

4.2.2 Positive Externalities

Third-party benefits to a market interaction are termed positive externalities.[20] Participants in the market (buyers and sellers) may be expected to act in their own best interests, and may fail to recognize (or value) benefits that accrue to non-participants. The level of activity in the market will reflect only the benefits to the participants. Thus, if positive externalities are present, the private market for educational services will provide less training activity than is socially optimal.

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[20] Weimer and Vining (1992, p. 57) define an externality as "any valued impact (cost or benefit) resulting from any action (whether related to production or consumption) that affects someone who did not fully consent to it."

It is generally accepted that there are social benefits[21] from education, over and above the benefits realized by the student and training provider:

> A common example of a positive externality is education. An individual consumer of educational services could reasonably be expected to consider only the benefits to himself and not the additional benefits which accrue to society. Yet the benefits to society of an educated populace are significant and are generally considered to be worthy of government intervention to ensure that educational services are not being under-consumed. (Dowling 1991, p. 6)

The first positive externality to vocational education arises from the impact of training on wage levels. Increased earnings of post-secondary graduates are well documented (Sudmant 1995, p. 1). The graduate captures the private return to training as an after-tax earnings differential. The public return is from increased tax revenues. These may come directly from income tax, or indirectly from taxes associated with increased consumer spending.

A second positive externality is derived from improved worker skill levels, which will result in an increase in the productivity of the labour force. This, in turn, will increase the international competitiveness of Canadian companies. As our businesses prosper internationally, employment levels will rise and individual tax burdens (to support social programs) will decrease, benefiting all citizens. The Strategic Information Research Institute suggests that skills acquired through higher education impact wealth creation by:

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[21] This paper will use the term social benefits to include both the private benefits (to the participants in the market) and public benefits (to the general population), and social returns to include both the private returns and public returns.

- enhancing the quality, range, and value of Canadian goods and services, thereby expanding exports;
- improving the cost-competitiveness by enhancing productivity;
- and improving the effectiveness of public services which, themselves, provide inputs needed to enhance the quality or cost-competitiveness of Canadian goods and services. (SIRI 1995, p. 6)

Stager (1989) adds to the list of external benefits,

> The most widespread external benefits of education would include its enhancement of democracy and democratic institutions; efficient operation of markets; adaptation to technological change; lower social welfare costs; more volunteer service in community organizations; a higher level of community health; and more sophisticated political and business leadership. (p. 66)

As stated previously, these external benefits are unlikely to be weighed in the decisions of the market. This will result in a level of training that is less than optimal for society as a whole. This constitutes a failure in the private market and is justification for government intervention to increase training activity to a socially optimal level. Determining the socially optimal nature and extent of this intervention requires a more thorough examination of the economic returns to education, and the division of these benefits between private and public interests.

The sections below will look at theoretical models and research findings which may assist in policy formulation for government.

a) Economic Returns to Education: As suggested above, the economic and social benefits of education are diverse. Identifying and quantifying these returns is often difficult. The next part of this paper will look at a models which will assist in understanding how, and by whom, the monetary benefits to education are captured. It

will then review some of the more pertinent research findings which give us some tangible measure of these returns.

Human capital theory suggests that investments in education are embodied in the individuals who have been trained. The acquired skills, knowledge, and abilities of human beings are the incremental human capital (Hornbeck and Salamon 1991, p. 3). This asset, as any capital asset, can be used to produce future returns. Human capital can be utilized in the production of goods and services. Considering only monetary benefits, the private returns may be found in higher wages paid to the trained individuals, and higher profitability in the companies that employ them. Public returns are found in increased taxes and in reduced unemployment arising from international competitive advantage.

Human capital theory gives us a means of estimating the present value of past investments in education and training. Postner (1989, p. 7) attempts to estimate the value of these investments, and writes, "As a ball-park estimate, Canadian human capital stock probably comprises about 60 per cent of total Canadian income-producing wealth." A significant portion of this wealth is the result of past investments in educational activity.

Cost-benefit analysis gives us another useful tool for evaluating education. It attempts to reduce all impacts of an action to a single measurement unit (Weimer and Vining 1992, p. 220), so that comparisons with alternative actions are possible.

The model depicted in Figure 4.1 is a graphical representation of the costs and benefits of a single educational activity. The costs of the educational activity are reflected in the negative returns during the training period (between 'enrolment' and 'graduation').

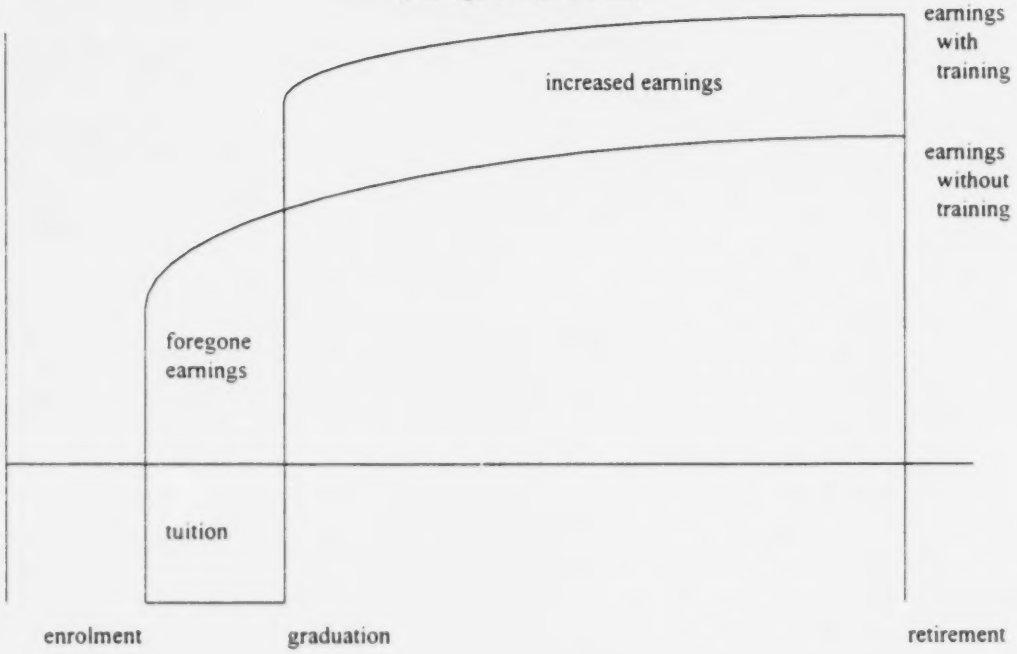
The returns to education are represented by the area marked 'increased earnings'. In this simplified model, all costs of the activity are incurred over the training period, and the benefits are realized over the time between graduation and retirement.

This model may be used to represent private returns to education (as is depicted in Figure 4.1). In this case, only the student's tuition and his or her foregone earnings are considered as costs. The graduate's after-tax wage differential is considered to be the benefit.

Figure 4.1

Private Costs and Benefits of Adult Education

(earnings are net after tax)



The model may also be used to represent the social returns to education. In this case, costs include tuition and all subsidies paid (directly or indirectly) by government.

Pre-tax wage differentials are then used to calculate the social (private and public) returns (Psacharopoulos 1981, p. 322).

A number of researchers have used the cost-benefit approach in an attempt to quantify the economic returns to education. There are some limitations, however, to the applicability of their work in this paper. They have not, for instance, focused specifically on the vocational training segment of post-secondary education. Much of the research reported to date is directed at the returns to activities carried out at universities. As outlined in Section 2.3, universities are involved in diverse services, including both vocational and liberal education, as well as research. The studies reported below do give some sense of quantification to the issues.

There is some variance in the methodology reported in the literature. Researchers take different approaches to quantifying the effects of education on future earnings. They may examine the wage differential between trained and untrained workers on a cross-sectional basis (Vaillancourt and Henriques 1986; Constantatos and West 1991) or on a longitudinal basis (Ashenfelter 1978).

In most cases, data are reduced to an internal rate of return on the investment in training, and compared to a benchmark estimate of the social rate of return (Vaillancourt and Henriques 1986; Constantatos and West 1991). A rate of return above the benchmark rate is considered justification for making the investment in education. A second

methodology (Sudmant 1995) is the calculation of the net present value[22] of the investment in education. A positive net present value is considered justification for making the investment.

In addition to quantifying the returns to education, researchers attempt to determine the extent to which they are private (the individual or company benefits) and public (society benefits). It is the public portion of the return that is the positive externality, and justification for the investment of public funds. Private returns are justification only for private investment by the student or employer.

b) Research Findings: Research supports the economic model of returns to education, as depicted in Figure 4.1. Ashenfelter (1978) followed US trainees (white and black, male and female) over a ten year period. He concludes, "All of the trainee groups suffer considerable declines in earnings in the year of training, and experience considerable increases in earnings after training" (p. 51).

Some researchers go on to distinguish between public and private returns. Psacharopoulos (1981, p. 326) uses an algebraic equivalent of the cost-benefit model to calculate rates of return from education in 44 countries. He identifies 4 patterns in his results:

1. The returns to primary education (whether social or private) are the highest among all educational levels.
2. The private returns are in excess of the public returns, especially at the university level.

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[22] Net present value is the difference between all benefits and all costs, converted to 'today's dollars' Future costs and returns are reduced by a 'discount factor'. This reflects the higher value of a dollar today than one that is to be realised in the future.

3. All rates of return to investment in education are well above the 10% common yardstick of the opportunity cost of capital.

4. The returns to education in developing countries are higher relative to the corresponding returns in more advanced countries.

Table 4.1 summarizes the results of Psacharopoulos' research for secondary and post-secondary education in Canada. Both public and private returns for post-secondary (higher) education are well above his 10% benchmark level.

Table 4.1

Rates of Return to Education in Canada in 1981

PRIVATE RETURNS (%)		PUBLIC RETURNS (%)	
Secondary	**Higher**	Secondary	**Higher**
16.3	**19.7**	11.7	**14.0**

source: Psacharopoulos 1981, p.327

Vaillancourt and Henriques (1986) examine the returns to universities in Canada. Table 4.2 summarizes their results. It shows a private rate of return of 10% and a public rate of return of 8% for a three-year university degree in British Columbia. The figures drop to a private rate of return of 8% and a public rate of return of 6% for a four-year university degree. This pattern is consistent across the country. Reflecting on earlier studies, the authors believe that rates of return have diminished by at least 5% over the five years preceding their work (p. 455).

Table 4.2

Rates of Return to University Education (%) in Canada in 1981

	PRIVATE RETURNS (%)	PUBLIC RETURNS (%)
Atlantic		
- 3 years	14	9
- 4 years	12	8
Quebec		
- 3 years	14	10
- 4 years	13	9
Ontario		
- 3 years	11	8
- 4 years	9	7
Prairies		
- 3 years	9	7
- 4 years	7	6
British Columbia		
- 3 years	**10**	**7**
- 4 years	**8**	**6**

source: Vaillancourt and Henriques 1986, p. 451

The rate of return to public investment observed by Vaillancourt and Henriques compares poorly with the usual benchmark of 10%. Constantatos and West (1991, pp. 133-134) question the validity of this figure, "Not all economists would accept 10 per cent as the appropriate benchmark." They suggest that a lower opportunity cost of public capital (6.3%) may be more appropriate.

Not all of the income differential between graduates and non-graduates can be attributed to the educational activity itself. Constantatos and West (1991, p. 132) suggest that "*ability* is also an explanatory variable, especially if we use this term to include socio-economic, including family environment, influences." Psacharopoulos and Woodhall (1985, p. 42) estimate that between 20% and 30% of income differential may be attributable to this factor. The authors suggest that some of the income differential enjoyed by graduates might well have existed without the educational experience.

Inclusion of an adjusting factor for ability may force a re-evaluation of recommendations, especially where the returns from education are close to the assumed cost of public capital.

The studies reviewed so far in this paper evaluate the economic impact of education on a national or provincial level. Some studies have attempted to quantify returns at the level of an individual institution. Sudmant (1995) has recently drawn on the findings of several studies to estimate the economic impact of the University of British Columbia. He calculates the net present value of a university degree at $108,270, considering both public and private investments and returns (p. 3). He uses a social rate of return of 7.58%, the most conservative of the studies he reviewed. This rate has been adjusted for the contribution of ability. Sudmant estimates the total cost to government to produce a university degree to be $82,000 and the discounted present value of future taxes to be $103,442. He concludes, "For every dollar spent by government in support of the university, $1.26 is returned" (p. 3).

Results obtained from applying a cost-benefit approach to the evaluation of public investment in education are far from conclusive. Investment in elementary and secondary education is clearly justified. Research findings for post-secondary education are less conclusive (Constantatos and West 1991, p. 134). Some writers have concluded that there is an over-investment of public funds in university education (Vaillancourt and Henriques 1986; Constantatos and West 1991).

c) Employer Investment in Training: The literature suggests that the greater portion of the economic return to training is captured privately. Private benefits are realized by the

individuals trained and by the companies employing them. Many companies recognize that the future benefits of a trained workforce outweigh the present costs of training. Indeed, Postner (1989, p. 13) suggests that expenditures made for training should be treated as investments. He includes in-house training in his evaluation, and suggests that much of the future return is expected to be private: "... most higher professional education and formal on-the-job training financed by business are oriented to raising future real (marketable) incomes and output-producing capacity." Crawford and Webley (1992) suggest that continuous education and training of the workforce is the surest way of making up for the depreciation of old intellectual capital, and ensuring the generation and accumulation of new" (p.14).

Why do some employers under-invest in training? While a private return to education is expected, the division of this return between the employer and employee is less predictable. The newly-trained employee may attempt to capture the return by demanding higher wages, or may choose to leave the company for a position elsewhere. From the employer's perspective, returns captured by the employee, or by another employer, are externalities. Employers may hesitate to invest in training if they doubt that they will reap the benefits. Some employers attempt to ensure that they will capture returns by negotiating a contract with the employee prior to supporting the training. Others will finance training only where the skills are not readily transferable to another company.

d) Summary: This section began by suggesting that, in the presence of positive externalities, the market would fail to produce the socially optimal level of training. It

then looked at the theoretical basis of this proposition, and some of the research findings in the field. There are a number of limitations to the research done in this area, and to its applicability to the subject of this paper:

1. The studies look at results for education generally or university education specifically. None looks at the more narrowly defined field of post-secondary vocational training.

2. Most studies are cross-sectional and assume that conditions over time will be sufficiently stable to produce similar long term results.

3. Most studies are quite general, looking at national or provincial data. Few studies look at the results for specific institutions. None looks at the economic returns to specific courses.

4. The assumptions used by writers in analyzing their data greatly influence their conclusions. The choice of social discount rate impacts the interpretation of more marginal results. The inclusion of an adjustment factor for ability lowers the rate of return attributed to education.

In spite of these limitations, certain patterns emerge from the data:

1. There are positive economic returns to education. These returns are both private and public.

2. At the current level of public subsidy, private rates of return to investments in education are higher than public rates of return.

3. There appears to be a trend to decreasing returns to education over the past five years.

In summary, the literature supports the existence of positive externalities to education, which is a rationale for the investment of public funds. There are, however, uncertainties about the level of return and the degree to which returns are public and private. This leaves a question about the appropriate balance between public and private investment.

4.3 Problems with the Private Market - Distributional Concerns

In Section 4.2, this paper suggested a rationale for government intervention based on efficiency problems in the market for educational services. This section will identify additional justification for government activity. Weimer and Vining (1992, p. 94) state, "Values other than efficiency... warrant consideration in our assessment of the extent to which any particular combination of private and public activity achieves the 'good society'." Our society places high value on equity of opportunity (access to education and training), and equity of outcome (access to employment). When these values are applied, the maximum welfare of society may be achieved in spite of efficiency losses from actions taken by government.

4.3.1 Equity of Opportunity

The collective will to distribute educational services fairly is well entrenched in our society. At the primary and secondary school levels, access to education is considered a universal right. While this principle is not applied to post-secondary education, most people would be uncomfortable with a distribution based purely on market forces. Under free market conditions, some individuals will be unable to access educational opportunities. They will lack the financial resources to make an investment (tuition and foregone earnings) in education. These individuals should be able to borrow the needed funds in the capital market. However, it will be difficult to assure the lender that the educational program will result in employment at an income level that will allow

repayment. Lenders will therefore be reluctant to grant loans for education without some additional security.

4.3.2 Equity of Outcome

The problems in the market for educational services are closely associated with inequities in the labour force. Individuals who are lacking in employable skills are likely to be unemployed, at risk of future job loss, or restricted to low-paying positions. Even when working, they may be unable to set aside money for the purpose of upgrading their skills. They are likely to remain at an economic disadvantage, no matter how motivated they may be to improve their lot. Thus, the problems associated with low skill levels and employment disadvantage reinforce and perpetuating each other.

Our society has expressed its willingness (through the legislative actions of its elected officials) to assist these people. This commitment extends to groups of people who are under-represented or disadvantaged in employment.[23] The British Columbia HRD Project suggested that,

> We must take the steps necessary, at all levels and in all aspects of our learning system, to ensure that the needs of aboriginal British Columbians, women, people with disabilities, members of ethno-cultural communities and visible minorities, the unemployed, and other emerging groups are addressed in such a way as to ensure that everyone in our society has a fair opportunity to learn and to contribute to the economic, social, and cultural development of our province. (British Columbia 1992, p. 31)

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[23] Historically, these have been identified as women, youth, visible minorities, disabled and aboriginal people.

The private market for educational services is unlikely to achieve the two distributional goals, equity of opportunity and equity of outcome. There may be some efforts on the part of non-profit organizations to provide training for members of their target groups. These efforts, however, are likely to fall short of the goal if financed only by private donation.

4.4 Summary

In this chapter, we have seen that there are failures in the market for educational services. The first failure, discussed in Section 4.1, is the asymmetry of information between the training provider and the consumer. This creates the potential for opportunism on the part of the private institution, for the purpose of increasing profits. Government intervention is justified to correct this failure in the market.

Section 4.2 discusses a second reason that the market does not achieve efficiency: the presence of positive externalities to education. There are economic benefits to education which are not considered by the buyer and seller. Research indicates that there are public returns, a justification for the investment of public funds. The positive public returns are a valid reason for government intervention to increase the level of educational activity.

Section 4.3 discusses a public viewpoint which values access to education and, subsequently, to employment opportunity. While recognizing that there may be efficiency losses in government intervention, the paper suggests that such activity is justified to achieve an equitable distribution of benefits.

5.0 CURRENT GOVERNMENT INTERVENTION IN THE MARKET

In Chapter 4, this paper suggested that failures in the market for educational services justify actions by government to increase social benefits. This chapter will describe the government interventions currently in place in British Columbia. Later chapters will consider whether these interventions are successful in correcting the market, or if alternate policy directions should be considered.

There are four main policy directions that government follows in the attempt to improve the market for educational services:

1. government regulates the private market for the service;
2. government influences the market for the service;
3. government supplies the service by directly producing it; and
4. government supplies the service by contracting-out to non-government providers.

There is some duplication of federal and provincial activities due to the overlap of their mandates in education and employment:

1. The Government of British Columbia regulates the private post-secondary training industry through the *Private Post-Secondary Education Act*, with enforcement powers delegated to the Private Post-Secondary Education Commission (PPSEC).
2. The Government of British Columbia and the Government of Canada contribute to a subsidy of tuition rates at public institutions and purchase training services outright for designated clients groups. Both governments offer student loans programs and tax incentives for participation in training.
3. The Government of British Columbia provides educational services through its system of schools, universities, community colleges and technical institutes.

4. The Government of British Columbia and the Government of Canada contract for training services delivered by private trainers in both the non-profit and for-profit sectors.

5.1 Regulation of the Private Post-Secondary Education Industry

The British Columbia legislature passed the *Private Post-Secondary Education Act* in 1990. With this legislation, the provincial government created the Private Post-Secondary Education Commission (PPSEC), and charged it with regulation of the private market for post-secondary educational services. Commissioners are appointed by the Minister[24] and include owner/operators of private institutions, directors of non-profit societies, staff of the public post-secondary education system, and individuals from the general public. The Act and its enforcement provisions are intended to correct problems associated with opportunistic behaviour on the part of private organizations.

Commission staff (PPSEC 1994b, p. 1) indicate that the Act differs from legislation in other provinces in a number of ways. The Act:

- establishes a commission that is separate from government;
- regulates a much broader range of post-secondary education, including adult basic education, English as a Second Language, academic programs offered by colleges and universities, job preparation programs, as well as all aspects of job training;
- regulates instruction and training offered by all sizes of operations, from a one-person training consultant to the largest of the private post-secondary institutions; and,
- provides for a voluntary accreditation process for all registrants.

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[24] Currently, the minister is Hon. Dan Miller, Minister of Skills, Training and Labour.

The Act requires that any person or organization providing education in the province to persons 17 years of age or older must register with the Commission, unless they are a public school board, college, university or institute, or otherwise excluded by the Minister.

The Commission's first responsibility is "to provide consumer protection with respect to registered institutions offering private post-secondary education and training in the Province" (PPSEC 1994a, p. 1). Institutions must provide information describing each program that they offer, the length of the program, and the minimum qualifications of instructors. The Executive Director of the PPSEC may require an institution to refund tuition fees if it is found to have misled a student on these matters (PPSEC 1994b, p. 3).

Institutions are required to have a signed contract with the student, disclosing all costs and the payment schedule. They must also follow a refund schedule set by the Commission, and have a dispute resolution policy in place. If the institution collects prepaid fees for courses, it must provide a bond or other financial security. This ensures that students receive a refund if an institution closes unexpectedly. The Executive Director has the power to suspend, or refuse to renew, the registration of an institution, based on concerns about past performance or financial stability (PPSEC 1994b, p. 3).

The Commission's second responsibility is to provide a process by which "registered institutions can demonstrate their integrity and educational competence" (PPSEC 1994a, p. 1). In September 1994, the sections of the Private Post-Secondary Education Act pertaining to accreditation came into force. Pilot projects have recently

been completed, and the process will be generally available to institutions in late 1995.

Accreditation is a voluntary program and its goals are to:

- stimulate the institution to discover its strengths and weaknesses through self-study, and act upon that knowledge;
- encourage the institution to work towards more efficient and effective management;
- encourage the institution to view involvement in accreditation as an on-going developmental process which will lead to higher levels of excellence over the five-year accreditation process; and,
- confirm the present performance and achievements of the institution in eight educational and administrative areas, each area of which has its own criterion or criteria. (PPSEC 1994b, p. 4)

The eight areas for evaluation are:

- institutional mission, goals and objectives;
- institutional administration;
- educational programs;
- instructors;
- instructional resources and equipment;
- students;
- student records; and
- physical plant and non-instructional equipment. (PPSEC 1994b, p. 5)

The registration and accreditation processes both operate on a cost-recovery basis, with fees being paid by the institutions when they register and if they seek accreditation.

5.2 Influence on the Market for Post-Secondary Educational Services

Federal and provincial governments provide capital and operating grants to public institutions. These subsidies allow public institutions to charge tuition rates which are well below the actual cost of production. In some cases, government gives full tuition support to individual students. These may be members of the equity target groups, or

people who are considered at risk of continuing unemployment (typically Income Assistance or Unemployment Insurance recipients).

Federal and provincial governments also increase market demand for educational services by subsidizing the cost of training through *tax expenditures*.[25] Purchases of school supplies are exempt from provincial sales tax. Personal income tax deductions[26] reduce both federal and provincial tax payments of the student.

Both levels of government attempt to improve access to the capital markets through student loans programs. The Canada Student Loans Program (CSL) is administered by the Education Support/Student Assistance Branch of HRDC. The program was revamped on August 1, 1995. Canadian citizens who attend at least a 60% course load at a 'designated institution' may apply for the program and enter into a loan arrangement with a 'participating lender'[27] (Canada 1995, p. 3-4). Payments are deferred until seven months after course completion and loans have long repayment periods. The federal government will pay the interest on the loan in case of hardship.[28]

The provincial loans and grants programs are administered by the Student Services Branch of the Ministry of Skills, Training and Labour. Non-repayable grants are available in the first 2 years of study, and loans may be negotiated for longer training

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[25] *Tax expenditures* are measures which use the tax system to provide a benefit to a specific group of taxpayers (British Columbia 1995, p. 67).

[26] A deduction of 17% of tuition, and of an $80 education tax credit, is allowed for full-time attendance.

[27] Under the revised plan, this will be a private lending institution. Several banks and credit unions are now participating.

[28] This assistance comes under the *Interest Relief Program*.

periods. Students must first be approved for a Canada Student Loan, and qualifications and terms of repayment are similar.

The federal government, through an awareness campaign, is attempting to influence employers to increase training support for their employees. Government publications like *Working Solutions* (Canada 1993) portray this as a responsibility as well as a good investment for business. Consequently, the government offers no financial incentive to employers to provide this training. An exception may be made to encourage employers to hire hard-to-employ individuals. The government may then provide a direct subsidy for skills upgrading (Canada 1994a, p. 42).

5.3 Government Production of Post-Secondary Educational Services

The provincial government produces educational services through its systems of schools, universities, colleges and institutes. The public post-secondary system is intended to replace inefficient market transactions and achieve distributional objectives. As outlined in Section 2.3, the province's post-secondary education system includes community colleges, university-colleges, specialized provincial institutes, universities, and the Open Learning Agency.[29]

Community Colleges: Colleges provide certificate-level and diploma-level courses in vocational, technical, and academic education, and specialized programs. The colleges each serve a geographical area and deliver services in about 80 campuses throughout the

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[29] This, and the following information, is taken from *Opportunities in Post-Secondary Education and Training*, a joint publication of the Ministries of Education and Skills, Training and Labour.

province. Many offer courses of particular importance in their local communities. For example ski area and golf club management are offered at Selkirk College in the Kootenay resort area. Students are able to attend community colleges as preparation for later transfer to the province's universities.

University Colleges: In addition to providing the range of programs and courses available at community colleges, university-colleges offer four-year undergraduate degree programs in partnership with universities and the Open Learning Agency. They also have the geographical focus of the community colleges. For example, agriculture technology is offered at the University College of the Fraser Valley, in the agricultural Fraser Valley region.

Institutes: Institutes offer technical training at the certificate and diploma level, and focus on a specific area of study. For instance, the British Columbia Institute of Technology concentrates on technologies and trades, while Emily Carr College specializes in fine arts and design. The Justice Institute offers training in areas related to public safety, and the Pacific Marine Training Institute offers maritime training.

Universities: The province's universities offer liberal and vocational degrees in a wide range of disciplines and professions. They offer higher education at the Masters and Doctoral levels. They have Continuing Education departments which offer part-time programs for adult learners. Universities play a special role as centres for pure and applied research.

The Open Learning Agency (OLA): The mandate of the OLA is "to develop and promote open education province-wide" (British Columbia 1993b, p. 6). Open education

addresses the needs of adults for flexible learning opportunities and recognition of a variety of past learning experiences. The Agency has three components: the Open University, the Open College and the Knowledge Network.

The Open University offers a range of college and university programs and works in partnership with other institutions. The Open College co-operates with business and industry to deliver workplace-based training. The Knowledge Network provides education by television, reaching remote areas. The OLA provides distance education courses and conferencing facilities in an effort to meet the varying needs of the adult learner. The OLA's British Columbia Educational Credit Bank allows previous learning to be assessed and credited towards educational credentials.

5.4 Contracting-Out of Training Programs

Federal and provincial governments contract with private organizations to supply post-secondary educational services in British Columbia. Contracting-out is done through individual purchase of courses and by means of projects which serve groups of trainees who have similar needs. This training is often provided without cost to the consumer, or at a subsidized tuition level. Individuals may be allowed to receive Unemployment Insurance or Income Assistance while engaged in training.

The Government of Canada purchases vocational training primarily through the Employability Improvement Program of the Human Resources Development ministry. Project-based training is provided primarily through the Canadian Jobs Strategy program. Staff of the Canada Employment Centres throughout the province refer their clients to a

variety of training programs. Referrals are made to private organizations and, inter-governmentally, to the provincial public system. Federal purchases have targets for equity group participation and some funds are reserved for Income Assistance recipients or Unemployment Insurance claimants. In recent years, federal efforts have concentrated increasingly on training the UI claimant.

Until 1994, educational services for Income Assistance recipients were the responsibility of the provincial Ministry of Social Services. Rehabilitation Officers were responsible for developing an Individual Opportunity Plan (outlining responsibilities and benefits) with their clients. They referred clients to federal programs or to the ministry's own R.I.S.E.[30] projects. These initiatives were offered within the public system and contracted-out to private providers.

With the creation of the Ministry of Skills, Training and Labour, responsibility for vocational training of Income Assistance recipients has shifted. The new ministry is in the process of introducing the *Skills Now* program which will purchase training programs - primarily in the public system, but also from private organizations. The four elements of the $220 million *Skills Now* program are:

1. linking high school to the work place through work experience and apprenticeship preparation;
2. increasing the number of student spaces in colleges and universities, and improving access;
3. retraining workers through small business and sectoral partnerships, and through local Community Skills Centres; and,

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[30] Regionally Initiated Strategies for Employment.

4. training programs for the unemployed.

Contracting-out to private-sector trainers will be one of the delivery methods used in the fourth initiative.

In summary, the governments of Canada and British Columbia follow a variety of policy directions in an effort to improve the market for post-secondary education in the province. Chapter 6 will look at the success of each of these alternatives from an efficiency and equity standpoint. This analysis will evaluate whether alternative policies should be considered.

6.0 EFFECTIVENESS OF GOVERNMENT INTERVENTION

Chapter 5 of this paper described four policy directions currently followed by federal and provincial governments to improve the market for educational services in British Columbia. This chapter will examine the effectiveness of these interventions in terms of increasing social benefits. It will begin by taking a broad look at the state of the labour market in the province, as an indicator of the effectiveness of the overall education system. Sections 6.1 to 6.4 will examine the effectiveness of each government policy direction: regulation, influence, production and contracting-out.

The Labour Market in British Columbia: The success of our education system is reflected in the state of the labour market. If the education system is operating effectively, our citizens will be able to access suitable employment, and our employers find workers' skills in line with their needs. A positive employment picture will imply that problems in the market for educational services have been largely corrected.

Unfortunately, evidence suggests that we have not yet achieved this enviable state, either in the province or in the country as a whole. Some 146,000 men and women in British Columbia were classed as unemployed in December 1994 (Canada 1994e, p. 22). Others are working fewer hours than they would like to. Meanwhile, employers are frequently frustrated in their attempts to hire suitably skilled people from the British Columbia labour pool. This leads to a concern that there is a mismatch between the jobs available in the work place and the skills of the unemployed (Park, Riddell and Power 1993, p. 1).

In the area of equitable employment, some recent trends are encouraging, but additional progress is needed. New Canadians continue to be disappointed in their efforts to integrate into the labour market. A recent report[31] indicates that working-age immigrants are less likely to be employed (at a 56% employment rate) than Canadian-born people (at a 62% rate). Immigrants' success in the labour force appears to vary with country of origin and with education level (Beauchesne 1995, p. A4).

Gender equity remains a concern in Canada. A recent United Nations report shows a decline in Canada's ranking on gender equality - from second in the world in 1970 to seventh today. Much of the decline is due to worsening gender-related wage equity, on which Canada ranks 47th of 55 countries studied, and last of the O.E.C.D. nations (Stackhouse 1995, p. A9). A recently-released Statistics Canada report[32] agrees, suggesting that some progress has been made, but that women are still at a disadvantage in the Canadian labour market. The report shows that women's average full-time income ($28,392 annually) is only 72% of men's, and that women remain under-represented in the professions. The problem is more acute when other 'equity' characteristics are factored in, as women "constitute a disproportionate share of the country's low-income population - a problem that is especially acute among visible minorities and aboriginal people" (Steele 1995, p. 28).

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[31] The Statistics Canada report, *Perspectives on Labour and Income*, profiles people who entered Canada from 1986 to 1991.

[32] The Statistics Canada report, *Women in Canada*, was released in August 1995.

Clearly, British Columbia is experiencing problems in meeting the needs of its diversity of workers and employers. Some disruption is to be expected during this time of turmoil, and problems in our labour market are related to overriding economic conditions. As previously stated, we face increasing competition in a global economy. The traditional resources-based economy is being replaced by a service and information-based economy. Three out of four workers in British Columbia are now employed in the service sector (British Columbia 1994, p. 5). The nature of the job itself is changing. The HRDC publication, *Occupational Outlook* suggests, "Non-traditional work arrangements have emerged as changes in the economy, such as the rise in the service sector and advancing technology, have transformed work arrangements and options" (Canada 199d, p. 3). However, the functioning of the labour market is also dependant on the effectiveness of the education system.

The remainder of this chapter will identify the extent to which government policies in post-secondary education have improved the market, left deficiencies in the market, or created problems of their own. To do this, we will examine the effectiveness of each category of government intervention separately.

6.1 Regulation of the Industry

In Section 4.2, this paper suggested that there are problems in the private market for educational services. Weimer and Vining (1992, p. 171) comment that governments may use regulations to coerce certain behaviours by monitoring compliance and punishing non-compliance. The British Columbia Government has enacted the *Private*

Post-Secondary Education Act to provide some protection to the consumer. The Act requires disclosure of information by training providers, a signed contract between the institution and student, a refund policy, and financial security for cash accepted in advance of service delivery (PPSEC 1994b). The Act is not intended to correct the problems associated with positive externalities or inequitable distribution of services. These are addressed by other government programs.

Information Asymmetry: The mandatory release of information required in the PPSEC registration process is a step towards overcoming information asymmetry. The disclosure requirement is quite limited, however, and its effectiveness is bounded by the ability of consumers to understand the information and make meaningful comparisons between institutions. Similarly, the enforcement powers of the Executive Director of the PPSEC, while significant, are dependent on the willingness of consumers to inform the Commission if service is not delivered as promised.

The Commission recently demonstrated its enforcement powers by suspending the registration of an institution after several student complaints of misrepresentation. If a planned appeal is unsuccessful, the institution will not be allowed to operate in British Columbia, and the PPSEC Executive Director will use the institution's financial bond to refund the unearned portion of the students' tuition fees (Dillon 1995, p. 1).

Registration was designed to provide financial protection for students, but not to guarantee quality. In an attempt to address this issue, the Commission is introducing a voluntary accreditation process this year. It will provide the consumer with some estimate of the quality of service they may expect from an institution. Each institution

will carry out a self-study and demonstrate to an audit team that they are delivering what they promise (Dillon 1995, pp. 1-2). Again, the success of this procedure will depend on the ability of students to use the information in a meaningful way. An indication of the potential impact may be found in California, where a similar accreditation program has been operating for six years. In that time, stringent accreditation requirements have resulted in a reduction in the number of schools from 3000 to 2300 (Dillon 1995, p. 2).

Limitations of Regulation: Government regulation of the private market will not remove all risk of opportunistic behaviour on the part of private institutions. There are limitations even to the accreditation procedure being implemented in British Columbia. Standards will be self-imposed, rather than meeting some external body's stipulations. Accreditation will be granted only at the institution level, not at the individual program level.

The Costs of Regulation: The Private Post-Secondary Education Commission is self-supporting.[33] The costs associated with registration and accreditation are assumed by the service providers and, ultimately, by those who engage in training. This arrangement addresses the budgetary concerns of government. It does however, increase the gap between the tuition rates for equivalent courses delivered at private and publicly subsidized institutions.

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[33] The Commission received a one-time start-up grant ($75,000) from the provincial government to assist in the first two years of operation.

6.2 *Influence on the Market*

Governments use incentives "to induce behaviour rather than command it" (Weimer and Vining 1992, p. 152). Federal and provincial governments attempt to stimulate demand in the market through subsidy of tuition and tax incentives for participation in educational programs. Governments also make it easier for students to borrow money to finance their education. These measures are intended to ensure that more people will engage in training and that there will be a more equitable distribution of these services. Government also encourages employers to assume more of the cost of training their employees.

Positive Externalities: Economic theory suggests that a reduction in the cost of a service will increase demand and, therefore, the participation rate (Emery 1984, p. 47). The public subsidy of tuition costs to the consumer greatly reduces the cost of participation. The current demand for publicly subsidized education programs indicates that this approach is quite effective.

The consumer's cost of training is also lowered by tax incentives. In theory, this should result in increased demand, but it is difficult to isolate this effect from that of tuition subsidy. There may be some dampening of the effectiveness of tax incentives, since the consumer does not see a benefit until the following year.

As shown in Section 2.3, there is a high level of participation in post-secondary education in this province. Certainly, tuition subsidy and tax reduction, acting together,

have increased the demand for educational services. These incentives address the under-supply issue associated with positive externalities to education.

Government efforts to encourage employers to increase training expenditures are not as effective. Recent reports suggest that many Canadian businesses continue to avoid responsibility for training. The Economic Council of Canada suggests,

> The investment by Canadian industry in the development of human resources is insufficient.... It is the Council's opinion that the overwhelming responsibility for job-related skill formation rests with business and labour.... Ideally a strong 'training culture' should be created by forces operating at the firm level - by employers viewing skill formation as an essential element of human-resource management, by unions making training a priority, and by employees taking initiative to update existing skills and to acquire new ones. (Canada 1990, pp. 20-24)

Distributional goals: Subsidized tuition, tax expenditures and student loans programs act together to increase demand among the economically disadvantaged. They further address distributional goals to the extent that equity group members are over-represented among the poor.

The goal of improving access to post-secondary education is addressed by subsidized tuition, which makes education available to individuals who could not afford to pay the full cost of a training program. Student loans programs ensure that lenders will accept applications from a wider range of borrowers, also addressing distributional objectives. However, the distributional goal is poorly addressed by tax measures under current rules. People in lower tax brackets will benefit less from tax-based incentives than those in higher tax brackets - the opposite of the distributional goal.

The Costs of Government Influence on the Market: The cost of subsidizing tuition at public institutions will be discussed in Section 6.3, which deals with public production of educational services.

The provincial government makes an estimate of the cost of tax expenditures. In this fiscal year, the lost revenue from sales tax exemptions for school supplies will be $10 million, and the loss to the province from the tax credit for tuition and education will be $30 million (British Columbia 1995b, p. 69).

A significant cost element of the student loans program has been the high default rate on loan repayment. Recent revisions to the program are intended to reduce the overall cost of administration. It is expected that financial institutions will be more effective at the collection of student loans, relieving government of this burden. Government will still pay an interest premium to the participating institutions.

The Dilemma of Public Subsidy: The use of public funds to subsidize training for all students attending public institutions presents a dilemma. It is clear that public subsidy allows participation by students who could not pay the full cost of training. However, subsidy of education at public institutions also benefits those who have the ability to pay full tuition, allowing a private return to accrue to a public expenditure.

In Section 4.2, this paper outlined evidence that there are both private and public returns to education. This is justification for some level of public subsidy of the costs of education. Establishing the socially optimal level of subsidization, however, requires further evaluation. Blaug (1970, p. 23) suggested, "Additional education can be more or less confidently expected to raise lifetime earnings and, in this sense, the acquisition of

education is in the nature of a private investment decision geared to future returns." Vaillancourt and Henriques (1986, p. 454) suggest that "the real after-tax private rate of return to a university education is significantly higher than rates of return associated with other types of investment such as long-term government bonds." They conclude that increasing tuition levels will not lead to a significant reduction in demand for educational services. They recommend that provincial governments reduce their subsidies to universities and increase the costs to students. They further suggest that changes to loan and bursary schemes will ensure that accessibility is not compromised (pp. 455-456).

6.3 Production of Services

Public production is intended to avoid efficiency problems in the market and achieve distributional goals (Weimer and Vining 1992, p. 180). The efficiency problems in the market for educational services are information asymmetry and the presence of positive externalities. The distributional goal is increased participation by members of equity target groups and the economically disadvantaged.

Economic theory suggests that there are problems inherent in government production of services (Weimer and Vining 1992, pp. 131, 178-181). The nature of the political process may undermine the establishment of an optimal level of publicly funded training. Political forces may make the expansion of the training infrastructure attractive to elected officials. The associated positive media attention may be seductive to politicians. Similarly, it would be difficult for a politician to make a decision to close a facility or terminate a program that he or she has previously supported, even if this

became the socially optimal course of action. The risk is that the government policy intended to overcome a market under-supply will result in an over-supply, perhaps of a specific program or in a specific geographical area.

Evaluation of Outcomes of the Colleges and Institutes: It is difficult to measure and interpret the success of training in a system as diverse as the public post-secondary system. The *B.C. Colleges and Institutes Student Outcomes Report*, prepared by the Strategic Information Research Institute (SIRI), provides relevant indicators. Key findings from the 1993 and 1994 reports include the following:

- college graduates value their education. Most students (90%) feel they are meeting their objectives;
- over 80% of job seekers are currently working full or part-time; 73% are currently working in a training-related job;
- of all former students, 62% are now working full-time; 85% of all job seekers obtained a training-related job in their first year after leaving training;
- job placement rates have declined over the years studied; and,
- gender participation rates have not changed and reflect the occupational gender mix. (SIRI 1993a, p.2 and SIRI 1994, pp. 7-8)

Information Asymmetry: Direct government provision of educational services avoids the risk of opportunistic behaviour to increase profits. The presence of heavily subsidized tuition at public institutions may even put a downward pressure on tuition charges at private institutions, reducing the risk of excessive profit-taking in that sector.

Information asymmetry between the public institution and the consumer still exists, but is less likely to lead to consumer loss. Public institutions have less incentive to take advantage of information asymmetry since they do not have a profit motive. This is

not a guarantee that public institutions will provide a more efficient, rather, the consumer will bear a smaller share of the losses from any inefficiency.

This is not to say that monitoring of the performance of public institutions is unnecessary. Weimer and Vining (1992, pp. 131-138) warn that inefficiencies may arise due to lack of competition, bureaucratic inflexibility, and difficulty in measuring performance.

a) Limited Competition: There are concerns about the cost-effectiveness of publicly funded institutions, which do not compete in the way that private institutions do. As Weimer and Vining (1992, p. 134) say "They do not pass a market test to survive." It may be argued that there is a degree of competition for student enrolments between the various public institutions, especially in urban centres. However, the current level of demand for heavily subsidized educational programs, has led to waiting lists at most public institutions. In remote areas, there may not be a choice between publicly funded institutions at all.

Competition between public and private institutions is also limited. The consumer who might consider attending a private institution is faced with tuition fees which must cover the full cost of training as well as a measure of return on investment for the owner. At a public institution, the student pays only the subsidized tuition fee. Even if the public institution is operating inefficiently, the student will pay far less for an equivalent course of study to one offered privately. Competition between public and private institutions is not a true test of the relative efficiency of individual institutions, or of these two organizational forms.

The fundamental difference in financing for public and private operations will affect the motivation of their managers to achieve operating efficiency. The owner of a private firm will capture efficiencies as additional profits (a personal or shareholder benefit). Profits may be captured directly (increased margin) or indirectly by lower tuition rates (and increased market share). The director of a public institution, however, is unable to benefit directly from an expenditure reduction, and may fear a future budget reduction if cost savings are captured. This may result in higher expenditures for wages, supplies and physical plant (Weimer and Vining 1992, p. 135). Where a discretionary budget[34] exists, it may be spent on additional staff or program expenditures to maintain future funding levels.

b) Inflexibility: Public bureaucracies are often criticized for a lack of flexibility. In a competitive market, responsiveness to consumer preference is considered a strategic asset. In the educational field, private suppliers may demonstrate this quality by offering incentives like continuous intake schedules, flexible study hours, and credit for prior learning. Public institutions receive the bulk of their funding from government sources, and will survive even with low levels of consumer satisfaction. Again, it is the lack of competitive pressure that allows this to happen - public funding will likely continue in spite of inflexible response to consumer preferences.

The consumer may suffer as a result of bureaucratic behaviour in the public education system. The two-semester year, for instance, does not meet the needs of all

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[34] A *discretionary budget* is the difference between the institution's budget and the minimum cost of producing the expected outcomes (Weimer and Vining 1992, p. 133).

people. Long courses may require the student to incur additional loss of income and higher levels of indebtedness on graduation. Public institutions may be disinclined to change their way of delivering educational services to address these concerns (Weimer and Vining 1992, p. 136). A student who would prefer a different service may find there is no alternative source of publicly subsidized training available. In a truly competitive market, these preferences would be seen as opportunities for niche markets, and private companies would seek to enter the market to meet consumer demands.

c) Valuation Difficulty*:* The cost of a service in an efficient, competitive market is determined by the interaction of the provider's costs, the level of competitiveness, and the consumer's willingness to pay.[35] Those who are willing and able to pay this price will make a purchase and others will not. Publicly subsidized institutions do not charge this full amount to the consumer. Public subsidy of tuition will, therefore, tend to increase the demand for training services. This may be exactly what was intended as a correction to a market under-production. It does, however, make it difficult to determine the socially optimal amount of training to provide. If the subsidy of tuition exceeds the public return to education, this amount will be exceeded.

Positive Externalities: Public production of educational services at subsidized tuition rates has resulted in a high level of demand for educational services. This alleviates the under-supply problem associated with positive externalities to education. However, tuition subsidy alone, without public production of services, would have a similar effect.

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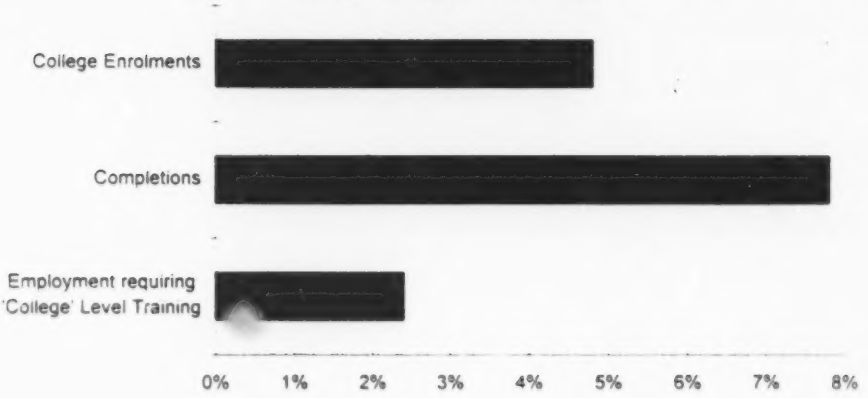
[35] This is the *marginal social value* of the service (Weimer and Vining 1992, p. 134). Public institutions provide service below this cost to increase demand or achieve a distributional goal.

There is some indication that the demand for the courses now offered at public colleges and institutes may exceed the capacity of the labour market to absorb graduates. The 1993 B.C. Colleges and Institutes Student Outcomes Report indicates that job placement rates have declined for college graduates and attributes this to "uneven changes in supply and demand forces" (SIRI 1993b, p. 2). The 1993 Report (SIRI 1993a, p. 2) suggests a rationale, "College enrolments have grown more rapidly than employment into which college students move."

Figure 6.1 shows that 1991 to 1992 increases in both college entrance (a 5% increase) and graduation (an 8% increase) have exceeded increases in employment requiring post-secondary credentials (under 2.5%). This will contribute to unemployment, under-employment[36], and the skills mismatch described earlier.

Figure 6.1
College Enrolments, Completions and Related Employment
Percent Change, B.C., 1991-1992



source: SIRI 1993b, p. 2

[36] Under-employment refers to work in a position which has a lower skill requirement than the worker possesses.

It may be that the very policy intended to increase participation in educational programs has led to over-consumption of certain services. There is some suggestion that the level of public subsidy of educational services is simply too high (Vaillancourt and Henriques 1986; Constantatos and West 1991). If so, public subsidy will create excessive demand among consumers and allow a private return to accrue to a public investment.

Distributional goals: As previously suggested, the public subsidy of tuition rates improves access for equity group members who are poor. Public institutions make additional efforts to directly increase participation rates of these groups. There is a high participation rate of women in university education, for instance.

The disabled population fares poorly in terms of access to public education. Panitch (1992, p. 44) cites recent findings[37] that indicate "people with disabilities are significantly under-represented in university and community-college training programs." She gives credit provincial governments for providing special needs counsellors, but comments that they "operate more on the basis of good will than any accountability the institution has to provide accommodations"[38] (p.50).

The Costs of Government Production: There is a significant cost associated with public production of educational services in British Columbia. The 1995/96 budget estimate for the Ministry of Skills, Training and Labour was $1.6 billion.[39] This is an increase of $34

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[37] Panitch cites The Roeher Institute study called *On Target*.

[38] Accommodation in this sense refers to such things as special equipment and course modifications.

[39] This is separate from the budget estimate for the Ministry of Education: nearly $4 billion. Together, at $5.6 billion, the two ministries will spend 28% of the total budget of $20.2 billion (British Columbia 1995, p. 25).

million or 2.1% from the previous year, due to increased funding for educational institutions, capital debt servicing, and the *Skills Now* initiative (British Columbia 1995b, p. 25). The high cost of producing educational services underlines the importance of seeking efficiency in the public system.

Weimer and Vining (1992, pp. 134-135) suggest that limited competition in bureaucratic supply may inflate the cost of producing the service. Publicly funded institutions are not driven to reduce costs in order to survive. Hence, they may spend more than is warranted to produce a service. Any such inefficiency, however, would be very difficult for the outsider to quantify.

This evaluation indicates that government production of educational services addresses the failures of the market. It also indicates there are inefficiencies in the public education system itself. This suggests that alternatives to public production should be considered. Government has the option of providing services through contracting-out to private organizations. It remains necessary to evaluate whether this approach can also overcome market failures and achieve distributional goals.

6.4 Contracting-Out of Programs

Weimer and Vining (1992, p. 185) report an increasing use of contracting-out as an alternative to government production. They suggest that this form of providing services may be more efficient than either market supply or government production, but caution that monitoring is important to avoid opportunistic behaviour of suppliers. If

contracting-out can improve the efficiency of the market, and avoid the problems inherent in government production, it will be a viable options for government training activity.

There is one clear advantage to contracting-out: government can choose to purchase a specific program to meet a specific objective. When there is competition for the government contract,[40] and effective monitoring is in place, this will be an efficient course of action. Through judicious use of this alternative, government may be relieved of the capital and operating costs of supporting a new public institution.

Information Asymmetry: Institutions have better information than consumers about the quality of their service and the employability of their graduates. This gives the unscrupulous provider an opportunity to mislead the purchaser, perhaps by charging too much or recommending an inappropriate course of study.

Governments as customers, however, have advantages over other consumers. They have access to information which is superior to that readily available to the individual. Federal and provincial governments have economists and labour market specialists on staff, and efforts are underway to share labour market information between them.[41]

In Section 4.2, this paper suggested that vocational education is a post-experience good, making consumer evaluation difficult even after consumption. Additionally, the

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[40] This field is very competitive. A recent meeting to explain a B.C. Skills Now request for proposals was attended by over 200 people.

[41] The Labour Market and Career Information Consortium, funded by a federal grant, meets regularly and has representatives from both governments, as well as from public and private sector institutions, school districts and employers.

interaction between a training institution and an individual student is commonly a one-time event. However, there is a significantly different relationship between institutions and governments, which are more likely to be repeat customers. With a longer term perspective, government can reduce the risk associated with the post-experience good nature of training.

Governments can also gain information about the quality of an institution's curriculum and delivery by seeking student and employer feedback, and by tracking employment outcomes over time. With this information, governments can make purchasing decisions with some confidence of positive results. A contract for educational services may be designed to have built-in safeguards against excessive profit-taking.

Positive Externalities: As is the case with public production, government may choose to subsidize the cost of educational services which are provided through contracting-out. Government purchase of educational services on behalf of its clients reduces or eliminates tuition-related costs borne by the student. This will increase demand and address the under-supply issue related to positive externalities. This is equally the case whether government produces the service or supplies it through contracting-out.

***Distributional goals*:** Contracting-out has the advantage of allowing very finely targeted initiatives. Governments often purchase training programs for their unemployed clients (such as those in receipt of Unemployment Insurance benefits and Income Assistance). To the extent that target groups are over-represented among the unemployed, this practice will address distributional concerns. Government achieves additional distribution by

demanding equity group participation in training programs and by contracting for services that are specifically targeted to their needs.

The Costs of Contracting-Out: The cost of contracting-out includes the delivery of service and the costs associated with contract negotiation and monitoring the performance of the contractor. In government decision-making, it may be contrasted with the cost of public production.

The relative cost of contracting-out may be perceived differently by federal and provincial governments, at least in the short term. The British Columbia Government already supports the infrastructure of the public education system, and may incur lower incremental costs than the federal government in delivering a program within that system. Long-term policy decisions of the province, however, should take into consideration the capital cost of building new infrastructure.

Additional factors to be considered are the costs of negotiating the contracting and monitoring the performance of non-government providers. Government agents must guard against opportunism on the part of contracted training providers. For vocational education, performance monitoring is relatively straightforward - as long as employment is considered the acceptable outcome. Courses in foundation skills (literacy, numeracy and ESL) are more difficult to monitor, since they may not lead directly to employment. In addition, the expected outcomes for disadvantaged students may need to be modified.

An example of efforts to control monitoring costs is found in the federal system. Metro Vancouver HRDC maintains an 'approved list' for courses delivered by private trainers. Institutions submit an annual summary of CEC clients trained, and their

employment status. A course must maintain 75% completion and placement rates to remain on the list. The review process is a co-operative effort of HRDC and the Private Career Training Association (PCTA),[42] and the cost is minimized by volunteer effort.

It is hoped that the accreditation process being implemented by the Private Post-Secondary Education Commission will result in a reduced requirement for monitoring the performance of private institutions. A joint committee of Human Resources Development Canada, the Ministry of Skills, Training and Labour, and Student Services (Student Loans program) and the Private Career Training Association is developing a single measurement which will meet all their outcomes monitoring needs. It is being modelled on the British Columbia Colleges and Institutes Student Outcomes Report.

6.5 Evaluations of Government-Sponsored Training Programs

There is public concern about the effectiveness of publicly sponsored training programs. This is part of an enhanced awareness of the need for fiscal restraint in today's economic climate. Additionally, there is concern that training cannot be a panacea for fundamental labour market changes. A recent editorial in the *Vancouver Sun* summarized, "Since the 50's the base level of unemployment has been rising in Canada and indications are that training policy can do little to arrest this trend. Training is no magic solution" (Vancouver Sun 1995, p. A10).

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[42] The PCTA is a voluntary association of private training institutions, with about 120 members. It is associated with the National Association of Career Colleges.

There have been a number of attempts in the US and Canada to measure the impact of government training initiatives. Results are inconsistent and inconclusive. As LaLonde says of US programs, "The best summary of the evidence about the impact of training programs is that we got what we paid for" (LaLonde 1995, p. 149).

Limitations of research design: The nature of social programs makes an experimental design difficult (Park, Riddell, Power and Wong 1994; LaLonde 1995). Experimental methodology requires two groups which are randomly selected to ensure similarity. In this design, program administrators would have to identify individuals who fit the eligibility requirements, then randomly deny service to a control group. When individuals are selected for special needs, this is likely to be unacceptable to program staff, funders, or the public. Researchers are therefore, most often forced to adopt non-experimental designs to estimate the impacts of programs.

Evaluations of US Initiatives: Studies in the US have suggested that government investments in training may result in substantial earnings gains for some participants, largely as a result of increased employment rates (LaLonde 1995, p. 162). Results are mixed, however, with disadvantaged women benefiting most, and youth and adult males gaining less. Training appears to be more effective when it teaches job-specific rather than basic skills (LaLonde 1995, p. 160). Job search assistance seems an effective intervention for dislocated (not disadvantaged) workers, but raises the question of displacement of non-participants. If participants simply obtain jobs at the expense of other applicants, there is no net social benefit - merely a transfer of benefits between groups. LaLonde concludes that there is an attraction to less expensive service for more

people, as opposed to more intensive efforts to help fewer people. He acknowledges that economic gains may be greater, but suggests that this may not be the best route for policy-makers to follow. He writes, "But only these expensive and intensive services offer the possibility of substantially reducing poverty among the economically disadvantaged, or of reducing earnings losses among displaced workers" (LaLonde 1995, p. 166).

Evaluations of Canadian Federal Initiatives: The federal government uses contracting-out extensively in British Columbia. While some training activity takes the form of government-to-government purchase at public institutions, federal authorities "have as a matter of policy sought to purchase an increasing proportion of the training for their trainees from the private sector and correspondingly less from public educational institutions" (Selman and Dampier 1991, p. 275). An examination of the experience of the federal government may offer some insights useful to this analysis.

Capstick (1995) recently completed a four-year longitudinal analysis of trainee outcomes for clients who were trained in 1988 under the Direct Purchase Option.[43] In that year, DPO programs included:

1. **Job Development**: a program to assist the long-term unemployed with a mixture of classroom and on-the-job training;
2. **Job Entry**: a program to assist young people entering the labour force for the first time (in particular school dropouts) or women re-entering the labour force after a long absence;
3. **Skill Shortages**: a program to train workers in designated occupations to meet labour market needs set by employers;

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[43] Direct Purchase Option programs are those where HRDC enters into agreement directly with a training institution for the purposes of obtaining training for a client. (Capstick 1995, p. 2)

4. **Skills Investment**: a program to provide training, relocation assistance and other industry-based measures to workers whose jobs are affected by technological or market change;

5. **Community Futures**: a program to help communities identify, develop. and undertake measures to expand permanent employment and assist individuals adjusting to a changing economic environment.

Data about trainees showed several differences from the working-age population:

1. females accounted for a higher proportion (60%) of trainees;

2. trainees were much less likely to have had post-secondary training in the past;

3. the majority were marginally attached to the labour force before training;

4. and 15% of trainees were native, 14% were receiving social assistance, 1.3% were disabled and 17.5% were immigrants to Canada. (Capstick 1995, pp. 2-5)

Capstick's results show an increase in average income of 118% between pre-training and post-training periods, from $4111 to $8965 (p. 6). As a result of increased incomes, trainees paid more income tax, and made more Unemployment Insurance and Canada Pension Plan contributions in the post-training period. Aggregate increases in payments to government increased by 189% from 1988 to 1991 (p.6).

The majority of trainees (57%) decreased their use of Unemployment Insurance post-training. There was an increase in the total amount of UI benefits received by trainees after training, but Capstick attributes this to greater entitlement of trainees who worked in the post-training period (p. 7).

Training outcomes are found to be affected by a number of factors. Most significant are high school graduation and labour market attachment prior to training. Results vary between fields of study and are more positive for employment-related training (as opposed to non-occupational skill-upgrading courses). Immigrants and those

needing E.S.L. benefit the most, while Native people and social assistance recipients do not fare as well as others (Capstick 1995, pp. 6-32).

The study also compares results of public (community colleges and institutes) and private training institutions. Trainees from public institutions report significantly higher post-training incomes and payroll contributions (Capstick 1995, pp. 34). On the other hand, the analysis shows that private institutions have a higher rate of participation by women, Native people, and those with limited labour market attachment. Private institutions offer more adult basic education and pre-vocational training. The author concludes,

> Thus it would appear that the better post-training success rates reported by public training institutions are a function of both differences in the trainee populations and differences in their mix of programming. Furthermore, it would appear that where private institutions deliver non-occupational training programs, they tend to deliver a larger share of basic skills courses to a more severely employment-disadvantaged client base. These factors, rather than the differences in institution type alone, explain a much greater proportion of the differences in trainee outcomes. (Capstick 1995, p. 38)

A previous HRDC program evaluation (Park, Riddell and Power 1993) looked at UI-sponsored training in Canada between 1988 and 1991. This study looked only at UI recipients, and followed outcomes of five programs:

1. **Feepayer option**: clients are allowed to attend school, but must arrange for tuition payment themselves;
2. **DIR**: clients take part in studies without approval or in the evenings;
3. **Job Development** (as described above);
4. **Job Entry** (as described above); and,
5. **Skill Shortages** (as described above).

The authors compare outcomes for 2450 UI trainees involved in these five programs to a group of 927 randomly selected UI recipients who did not engage in training. They caution that the analysis uses a "non-experimental design to estimate the program impacts" (Park et al. 1994, p. 4) and point out,

> It is possible that training is recommended to and chosen by those who face the greatest difficulties in obtaining a job, or who have the least skills and thus earn the lowest wages. This is especially likely to be the case for participants in the Job Entry and Job Development programs which are targeted on individuals facing the greatest labour market difficulties. If this type of selection into the training option occurs, the proportion of time spent employed or the earnings of trainees could be lower than those of non-trainees even if training was indeed successful in raising the employability, productivity and earnings of those undertaking training. (Park et al. 1994, p. 5)

The study looks at five measures of employability:

Probability of Re-employment: Feepayer and Skill Shortages had a similar chance of being re-employed as the general UI population. Job Entry, Job Development, and DIR trainees were less likely to get a job. British Columbia and Alberta trainees did better in this measure. Equity group members and women with children under 6 did not fare as well as others.

Length of time needed to get a job: Trainees required substantially less time than non-trainees to find a job after training.

Proportion of time spent employed: The analysis indicates that Job Entry, Feepayer, and Skill Shortages programs have a positive impact on the proportion of time employed in the years following training. Other programs do not have a statistical impact.

Incidence of social assistance receipt: For this measure, "employability was not improved by training" (Park et al. 1994, p. 31). In fact, two groups experienced an increase in incidence of reliance on social assistance. This effect was primarily restricted to Ontario, and may be attributable to the recession which occurred during the study period.

Earnings: The authors report "UI training programs effects ranged from zero (DIR and Job Development) to impressively large (Job Entry, Feepayer and Skill Shortages)" (Park et al. 1993, pp. x-xi).

In their summary, Park et al. give a mixed account of the effectiveness of UI-sponsored training programs. They do conclude, as did Capstick, that the most effective training appears to be training for a specific job (Park et al. 1994, p. 32).

Interpreting the Evaluations: These two studies give some insight into the effectiveness of federal training initiatives undertaken in the 1988-1991 time period. It should be noted that some of these programs (i.e. Job Entry) have been revised or replaced. The federal government has also announced the implementation of a new strategy, the Human Resources Development Fund, to be implemented in the Fall of 1996.

As Park et al. suggest, a study employing true experimental design would be difficult in this field. Individuals who participate in federal training programs are selected for intervention, often because they have several barriers to employment. Selecting a control group from the same population, and not giving them assistance, would be

unacceptable for political reasons. Park et al. do apply a variety of econometric and statistical techniques to extract their conclusions, but do so with the caution quoted above.

It can be concluded that contracted-out training programs can have a positive impact on future employment prospects. However, the level of impact varies with the outcome chosen for measure, the target group, the background of participants, and the intervention itself. Federal government programs in the study period were intended to help employment-disadvantaged individuals, such as youth, women re-entering the work force, and equity group members. If an acceptable outcome is then taken as equality of employment prospects, these programs had a measure of success. Certainly, if Psacharopoulos and Woodhall's estimate of the impact of "ability" (as discussed in Section 4.2) is considered, outcomes equivalent to the general population are quite positive.

6.6 *Problems with the Formation of Government Policy*

Economic theory suggests that there are problems inherent in the formation of government policy. These are related to the democratic and electoral processes.

Motivation of Elected Officials: In the democratic system, citizens elect representatives they believe will stand up for their interests, supporting actions that provide a direct benefit as well as those that lead to a 'better' society. Responsible elected officials will have to balance these (sometimes conflicting) interests and their own belief systems as they choose their actions (Weimer and Vining 1992, p. 119).

Periodically, citizens are given the opportunity to review the performance of their representatives and re-evaluate their choice in another election. This leads to the first problem with government activity. Elected officials may choose to act in a manner that maximizes their chance of being re-elected. This may lead to choices which will appear to benefit their constituents, in spite of a greater social cost. An example from the education sphere might be lobbying for the construction of a college in their district when this is not the most efficient course of action. The local benefits seen by the voters may outweigh their perception of a social cost, motivating them to vote for the incumbent.

Planning Horizons: The electoral cycle may motivate elected officials to support actions which will have positive short-term benefits, even at the expense of the longer term (Weimer and Vining 1992, p. 128). Similarly, unpopular actions may be delayed until after an election has occurred. Some actions which may result in unattractive media attention may be avoided completely in the name of re-election.

Special Interest Groups: A second problem with government activity is related to an inherent bias in the feedback officials receive from the electorate on policy issues. Constituents will vary in the degree to which they become informed about, and active regarding, specific issues. Individuals will balance the investment of their limited resources (time, energy, and money) against their perception of the importance of the issue and the potential for future pay-back. Hence, those most significantly affected by the direction of public policy will be most inclined to make themselves heard.

Those with personal interest in government choices are more likely to organize themselves in an attempt to influence the direction of those choices. They may form

special interest groups to exert pressure on elected officials through the media, by lobbying, or other means. They may seek to bring about new policy directions, or to perpetuate programs that benefit group members.

An example may be drawn from the debate over increasing the level of tuition fees. Those who do not pay tuition are in the great majority, but are minimally affected by the direction of related public policies. The cost of the public subsidy to education is widely spread and individual taxpayers will not gain or lose significantly if fees are adjusted. They are, therefore, unlikely to express an opinion (whether positive or negative) or to take collective action to exert pressure on legislators. Students, however, are very concerned about the prospect of increased tuition, since they will be directly and significantly affected. They are likely to be very vocal in their opposition to tuition increases, and likely to organize themselves into action groups. Recently, the media gave wide exposure to student protests over proposed cuts in federal transfer payments for post-secondary education, and the tuition increases likely to follow. The politicizing of this issue may interfere with the socially optimal allocation of the costs of education programs.

6.7 Summary

The analysis completed in this chapter indicates that government intervention has made improvements in the competitive market for educational services. However, it also suggests that British Columbia's requirement for an efficient, effective and equitable

education system is not being fully met. There is an indication that government intervention has created its own problems.

Table 6.1 summarizes the impact of existing interventions on the identified problems with market supply, as well as problems inherent in these interventions. The table reveals mixed results from the four policy directions. It is clear that regulation of the private market for educational services in British Columbia has increased efficiency by protecting the consumer from opportunistic behaviour. The cost of this regulation has been borne by the private institutions, and indirectly by the consumer. Attempts to influence the market have had some success in increasing overall demand and access by members of target groups. It is difficult to isolate the impact of the various incentives and to avoid over-subsidization. Government production has been successful in overcoming market failures, but has added its own problems, including high costs. Contracting-out achieves consumer protection and distribution of training, but presents challenges in terms of monitoring the performance of contractors.

It may be that a combination of interventions is most effective , and that the best combination may vary with the location, demographics, and field of study. For instance, contracting-out to private companies in a regulated industry may be a very efficient method for government to provide specific courses for target groups.

Table 6.1

Impacts of Current Government Interventions

GOVERNMENT INTERVENTION	PROBLEM ADDRESSED	EFFECT ON THE MARKET	ADDITIONAL IMPACT
Regulation	Information Asymmetry	Some consumer protection from information disclosure and enforcement powers of Private Post-Secondary Education Commission. Accreditation may improve this further.	Additional cost to private institutions increases tuition and public/private cost differential.
Influence	Positive Externalities Distributional Goals	Reduced costs and easier financing increase demand. Improved access for the poor. Limited effectiveness in improving opportunity and outcome for equity groups.	Private return to public investment. Under-investment by private interests.
Production	Information Asymmetry Positive Externalities Distributional Goals	Reduced consumer risk. Increased activity led by increased supply (and by subsidy). Limited positive effect on distribution.	High cost to society, may not be justified by return. Oversupply in some programs.
Contracting-out	Information Asymmetry Positive Externalities Distributional Goals	Reduced consumer risk. Good effect on access to education. Mixed effect on employment.	Increased cost of monitoring - could be reduced with accreditation.

It is clear that no single intervention will solve all problems in the market, and do so in an efficient way. This suggests that a review of additional options for government intervention may reveal alternate policy directions worthy of consideration by the British Columbia Government.

7.0 POLICY OPTIONS

In Chapter 6, this paper evaluated the effectiveness of the current government interventions in the market for educational services, and suggested that alternative policies should be considered. The analysis also suggested that no single policy approach would be effective and efficient in correcting *all* problems in the market. This chapter will look at a range of policy directions available to government and potential application to adult education. This will begin our search for a combination of policies that will both correct the market failures and improve the effectiveness of government intervention.

7.1 Policy Approaches and Applications to Adult Education

The issues identified in this paper include the presence of information asymmetry and positive externalities in the market for educational services, and a society that values equity of opportunity and outcome. There are several directions government could take in educational policy development and there are advocates for each of these directions. How is government to choose between conflicting alternatives? A model which summarizes the available options is a helpful starting point.

Weimer and Vining (1992, pp. 144-194) provide a categorization of five generic policies available to government to improve private markets. They go on to make specific policy recommendations for identified problems. Table 7.1 lists the recommended policy alternatives for addressing the three problems which have been identified in the market supply of educational services in British Columbia.

Table 7.1

Policy Alternatives for Government Intervention

PROBLEM	CATEGORY	POLICY ALTERNATIVES
Market Failure: **Information Asymmetry**	3. Rules	Frameworks: 1. Civil Laws Regulations: 1. Direct Information Provision 2. Indirect Information Provision
	5. Insurance and Cushions	Insurance: 1. Mandatory insurance 2. Subsidized insurance
Market Failure: **Positive Externality**	2. Taxes and Subsidies	Supply-side Subsidies: 1. Matching Grants 2. Tax Expenditures Demand-side Subsidies: 1. In-kind Subsidies 2. Vouchers 3. Tax Expenditures
	4. Non-market Supply	Direct Supply: 1. Bureaus Independent Agencies: 1. Government Corporations Contracting Out: 1. Direct Contracting Out 2. Indirect Contracting Out
Distributional Issue: **Equity of opportunity and outcome**	2. Taxes and Subsidies	Supply-side Subsidies: 1. Matching Grants Demand-side Subsidies: 1. Vouchers 2. Tax Expenditures
	3. Rules	Frameworks: 1. Civil Laws Regulations: 1. Price Regulation
	4. Non-market Supply	Direct Supply: 1. Bureaus Independent Agencies: 1. Government Corporations Contracting Out: 1. Direct Contracting Out 2. Indirect Contracting Out

source: Weimer and Vining 1992, pp. 144-194

Weimer and Vining (1992, p. 145) group the policy alternatives into five generic categories: 1) freeing, facilitating, and stimulating markets; 2) using taxes and subsidies

to alter incentives; 3) establishing rules; 4) supplying goods through non-market mechanisms; and 5) providing insurance and cushions.

Category 1. Freeing, Facilitating, And Stimulating Markets: This approach is most appropriate in markets that are expected to operate efficiently (Weimer and Vining 1992, pp. 146-152). The inherent problems in the market for educational services, and the distributional goal, suggest that this approach should not be followed in the development of government policy.

Category 2. Using Taxes And Subsidies To Alter Incentives: This approach is suitable when the objective is to correct market failures and achieve redistribution. It is intended to modify the behaviour of market participants by making actions more attractive (subsidies) or less attractive (taxes). Weimer and Vining (1992, p. 153) describe the "use of subsidies[44] to lower the private cost of things that are too scarce from the social perspective." Subsidies can be used both to increase supply and to target specific groups. Subsidies may be granted either to institutions (supply-side subsidy) or to purchasers (demand-side subsidy).

In the field of education, institutions may be given outright grants (supply side subsidy) to reduce the cost of delivering service. Alternately, tax expenditures may be used to reduce the net cost of delivery. In either case, the institution will be able to reduce tuition and still cover its costs. Lowering the tuition will increase demand and more people will participate in training.

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[44] The relief of a tax burden is also considered a subsidy.

On the demand side, consumers may be provided with training directly (in-kind grants), or with vouchers which allow them to attend an institution of their own choice. Tax expenditures can also be used to reduce the effective cost to the consumer. Government may also allow students (or their employers) to claim tax deductions for tuition expenditures. The increase in after-tax income will tend to offset the tuition expense. Costs will be lowered and more people will attend training programs.

Targeted use of subsidies may also address distributional issues. Grants to institutions for accepting members of equity target groups, or subsidies provided to these individuals directly, will increase their participation in training.

Category 3. Establishing Rules: This approach uses legislation to command desired behaviours. Rules and regulations may be quite effective in protecting the consumer, and may be used to mandate standards and behaviours. For instance, as Weimer and Vining (1992, p. 170) state, "Contract law can ... be used to reduce the consequences of information asymmetry." When backed up by the power of law, rules and regulations can punish transgressions and exclude undesirable participants from the market

Educational institutions may be required to disclose information that is important to the buying decision, and to have a signed contract delineating the services they will deliver. Mandatory 'cooling-off' periods and refund policies may be specified.

Consumer protection may be provided through sets of regulations that require certain behaviours of suppliers. These may include registration and certification procedures that bring operators within a framework of operations. Regulations may set minimum quality expectations, such as instructor qualifications and environmental

standards. Price ceilings may be imposed to increase demand. Bonding requirements may protect the student against failure to deliver service, as may happen in the case of bankruptcy.

Regulations may also ensure that information is available to the consumer. Government may require the disclosure of information (such as placement rates) by institutions. Alternatively, government agencies may provide the information directly to the consumer. Relevant information could include general predictions about the employability of certain courses, as drawn from labour market statistics and employment forecasts. Government could go as far as supplying specific information about the quality of individuals institutions.

Information about service quality may be provided indirectly as well. Registration, certification, and accreditation of institutions, instructors, and courses may all be used as signals to the consumer of standards they may expect after enrolment.

Distributional objectives may also be addressed by commanding certain behaviours. Institutions may be required to meet targets for equity participation, or to make modifications to their facilities to accommodate special needs. Price ceilings may be set to increase participation by groups who would be under-represented in the competitive market.

Category 4. Supplying Goods Through Non-Market Mechanisms: This approach is intended to overcome problems in the market by replacing private supply with services provided by government agencies. On first glance, this seems an attractive course to take. Certainly, failures in the market are 'corrected' by elimination of the market itself. This

action must, however, be weighed against other actions that will improve the functioning of the market (Weimer and Vining 1992, p. 178). Indeed, public and private supply can coexist, as is now the case in British Columbia's education system.

Government may contract educational services out to non-government organizations. These may be companies in the private market (direct contracting-out), or non-profit organizations that have a special expertise (indirect contracting-out). Contracting-out is recommended not only to achieve market improvements but also to avoid problems in government production (Weimer and Vining 1992, p. 180). Equity participation goals may be addressed by selective contracting-out to agencies working with groups that are under-represented in training programs or in employment.

Category 5. Providing Insurance And Cushions: This approach is intended to provide protection to the consumer against negative outcomes of market transactions. Individual risk can be reduced through pooling (Weimer and Vining 1992, p.186), and there is an insurance industry which capitalizes on this fact. However, protection is not always available through private insurance markets. Additionally, some individuals may misjudge risk and not avail themselves of insurance when it is available.

In the case of career training, the most obvious risk is the failure to obtain employment. Even with the best of intentions and efforts on the part of training providers, there is still a risk of unemployment after graduation. This is due to several factors including imperfect labour market information, imperfect training programs, and qualities of the student which are independent of the training experience. Even the best labour market information is 'out-of-date' as soon as it is published. As suggested in

Section 4.2.1, it is difficult to evaluate training options prior to participation. Individual students come with their own foundation skills, aptitudes and motivations. All of the factors may impact employability.

Insurance against unemployment will reduce this risk. However, a private market for insurance against unemployment is unlikely to operate efficiently. Those most at risk of unemployment would be most inclined to purchase the insurance, and those most likely to be employed would tend not to do so.[45] Thus, there would not be a pooling of risk. Some factors predisposing an individual to unemployment (such as chronic illness or low motivation) might be known to the individual but not revealed to the insurer. If a private market for insurance does not operate, government may provide a substitute with unemployment insurance and social welfare programs.

Many of the policy approaches outlined in Section 7.1 are being followed by the British Columbia Government today. Table 7.2 summarizes the most significant activities presently conducted in each of the four policy categories recommended to correct the problems in the market for educational services.

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[45] Known as *adverse selection*, this phenomenon is likely to limit the availability of insurance (Weimer and Vining 1992, p. 188)

Table 7.2

Current Government Policies and Activities

CATEGORY	POLICY FOLLOWED	MAJOR ACTIVITIES
2. Taxes and Subsidies	Supply-side Subsidies: Demand-side Subsidies:	Subsidy of tuition in public institutions Student loans and grants
3. Rules	Regulations:	Private Post-Secondary Education Act
4. Non-market Supply	Direct Supply: Contracting Out:	Public colleges, institutes and universities Skills Now Program Purchase of training Canadian Jobs Strategy (federal)
5. Insurance and Cushions	Insurance:	Unemployment Insurance Income Assistance Workers' Compensation

7.2 Summary

There are various policy alternatives open to the British Columbia Government as it seeks to address the failures in the market for educational services and the distributional goals of our society. Some activities create their own problems and others are likely to alleviate these secondary problems. It is unlikely that the best path lies in a single action, or even that a good approach will always be successful. In the following chapters, this paper will look at some policies which are being advocated today, and analyse their expected impact.

8.0 POLICY GOALS

In Chapter 7, this paper suggested that there are many alternate policy directions open to the British Columbia Government in the field of post-secondary vocational education. The choice between conflicting alternatives will best be made if goals for government intervention are first established.

To this end, it may be helpful to revisit the field of adult education and to redefine the vocational education segment. There are many reasons why adults seek new learning experiences, and many venues for achieving their objectives. Adults may wish to cope better with their daily lives: to be more confident and to deal more effectively with people who are significant to them. They may seek the pure joy of learning about their world and how they relate to it. They may wish to improve skills which allow them to pursue recreational activities. All these are valid and significant goals within the broad definition of adult education.

The vocational education segment of adult education is more pragmatic. Most individuals, at some point in their lives, will seek to develop or improve the skills which allow them to perform as productive members of the labour force. They may seek training to overcome, or to avoid, unemployment. They may wish to enhance prospects for progressing in their careers. They may initiate training themselves or they may be required by their employers to participate. If they are in receipt of social assistance, government workers may also insist upon their participation.

Some individuals may be willing and able to finance their own training, perhaps by borrowing against future earnings. Some employers may be willing to subsidize the tuition, or may provide the training experience themselves. Other individuals may need government assistance if they are to participate in training.

Our society has good reason to support the educational activities of its individual members. There are benefits to education beyond those which are readily apparent to the learner and to the training provider. Our sense of what makes our country great includes its commitment to fairness in access to education. This feeling is entrenched in the principle of universal access at the primary and secondary school levels. Our collective largesse extends to adults who are in need of assistance to achieve equality of opportunity.

Governments act as the agents of the people in turning these many aspirations into a set of policies and procedures. However, there are significant limitations on what government can accomplish, considering the limitations of the people in financing tax-based programs. In today's fiscal climate, expenditures in education must not only be justifiable, they must compete with those in other important areas such as health and social assistance.

8.1 Recommended Policy Goals

The author believes that, in establishing policies in the area of post-secondary vocational education, the Government of British Columbia should keep the following goals in mind:

Efficiency Goals:

1. The education system in British Columbia meets the demands of students and employers for effective preparation for the work place.

2. Consumers are provided reasonable protection in the private market for educational services.

3. Publicly subsidized vocational education closely reflects the requirements of the work place.

4. Publicly subsidized vocational training programs provide an appropriate economic return to society, or contribute towards the realization of a distributional goal.

Distributional Goals:

1. Individuals more in need have public assistance in order to have equitable access to educational opportunities.

2. Individuals from groups that are under-represented in education have public assistance in order to have equitable access to educational opportunities.

3. Individuals from groups that are under-represented in employment have public assistance in order to have increased access to educational opportunities.

Budgetary Goals:

1. Those who share the benefits of educational activity share the costs.[46] Consumers assume a proportion of the cost of education in line with expected private returns.

2. Educational opportunities are provided in a manner which considers quality and efficiency. When public funds are used, the choice of training provider[47] takes relative costs and benefits into consideration.

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[46] This will include employers as well as workers.

[47] Training providers include public colleges and institutes, private companies and non-profit agencies.

Political Goals:

1. Policies adopted by the Ministry of Skills, Training and Labour receive the support of the electorate.

2. Policies adopted by the Ministry of Skills, Training and Labour will survive a change in government.

8.2 Deciding on Policy Directions

With the above goals in mind, we can look at policy alternatives with a more critical eye. It will quickly become apparent that there are some conflicts between the above goals, and that certain trade-offs will be required. The range and diversity of the goals lead to a complex evaluation process including, but not limited to, an evaluation of costs and benefits.

In Chapter 9, we will look at several alternatives which require a combination of government policies and strategies. We will estimate the impact of these alternatives on the four goal clusters: efficiency, distributional, budgetary and political.

9.0 POLICY ALTERNATIVES

Post-secondary vocational education is a complex system. Predicting the impact of a single government policy in isolation is likely to be misleading. There are many combinations of policies that government can adopt, and these policies will interact in complicated ways. We will, therefore, consider alternatives which require the implementation of a several policies concurrently policies. These will have impact on public institutions, private institutions, employers and consumers. In Chapter 10, we will measure the expected outcomes of alternatives against the goals outlined in Chapter 8.

9.1 Five Policy Alternatives

We will examine five possible alternatives, each of which requires implementation of several government policies. Table 9.1, found at the end of this chapter, summarizes the following alternatives:

1. **Maintain the status quo**: British Columbia already has an education system which performs reasonably well, and stands up to comparison with other regions in Canada. In this first alternative, government would continue to deliver vocational training primarily through public institutions. It would expand or build facilities to meet increasing demand. Tuition would continue to be heavily subsidized at public institutions but not at private ones. Students would be further assisted by loans and grants. Private sector institutions would operate with regulation. Government contracting with private sector training providers would be limited to special programs

that are not available (or under-supplied) in the public system. Unemployment insurance and welfare programs would provide protection from negative employment outcomes.

2. **Privatize**: In this alternative, British Columbia would sell its colleges and institutes to private sector interests, who would operate them in a market environment. Government would, however, regulate the industry to offer some consumer protection. Tuition subsidies, grants and loans would all be eliminated, but government would purchase training services for designated clients to achieve distributional goals.
3. **Private market with subsidies**: In this case, government would also sell colleges and institutes to private sector interests and regulate the industry to ensure consumer protection. Government would, however, provide subsidies to the institutions themselves to increase the level of training. Government would purchase services or provide additional subsidies to increase equity group participation.. Government would continue to operate student loans and grants programs, and insurance and welfare programs.
4. **Equalize**: In this alternative, British Columbia would eliminate tuition subsidies to public institutions and expect them to compete with private sector institutions on an equal basis. Again, government would regulate the industry to ensure consumer protection. Contracting-out would be used whenever private institutions could offer more efficient service than public institutions[48]. Public institutions would withdraw

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[48] For a more detailed discussion, see Section 10.1.

from markets which are better served by private trainers. Government would mandate a system of credentialing which would give equivalent credit for training in public and private sectors. Government would continue to operate student loans and grants programs, and insurance and welfare programs. Government would facilitate consumer access to labour market information.

5. **Rationalize**: In this final alternative, government would reduce direct subsidies and increase tuition charged at public institutions. A demand-side subsidy, such as student vouchers, would reduce the financial burden for training at both public and private institutions. The level of subsidy would be designed to reflect the distribution of returns to the educational activity. Government would act to facilitate bridging within the public and private sectors, encouraging the acceptance of credentials between institutions and across sectors. Government would continue to operate student loans and grants programs, and insurance and welfare programs. Government would facilitate consumer access to labour market information.

Table 9.1 summarizes the government activity required within the five alternatives. Activities are broken down into those which affect the operation of public institutions, those which affect private institutions, those which are primarily financial in nature and others.

Table 9.1

Summary of Alternatives and Activities

	ACTIVITY: PUBLIC INSTITUTIONS	ACTIVITY: PRIVATE INSTITUTIONS	FINANCIAL ACTIVITY	OTHER ACTIVITY
1. **Status quo**	**Direct Supply**: Produce most services through public institutions. Expand or build facilities to meet demand.	**Regulations**: Regulate the private industry. **Contracting-out:** Limit contracting-out to special or under-supplied services.	**Supply-side subsidies:** Subsidize tuition at public institutions. **Demand-side subsidies:** Provide student loans and grants	**Insurance:** Provide UIC and welfare
2. **Privatize**	Sell publicly owned institutions to private market interests.	**Regulations**: Regulate the private industry. **Contracting-out**: Purchase services to meet distributional goals.	Allow market forces to operate. Eliminate subsidies, grants and loans.	
3. **Private market with subsidies**	Sell publicly owned institutions to private market interests.	**Regulations**: Regulate the private industry. **Contracting-out**: Purchase services to meet distributional goals.	**Supply-side subsidies**: Subsidize tuition at private institutions. **Demand-side subsidies**: Provide student loans and grants	**Insurance**: Provide UIC and welfare
4. Equalize	**Direct Supply**: Expect public institutions to compete with private institutions without subsidy. Withdraw from some markets.	**Regulations:** Regulate the private industry. Provide consumer information. **Contracting-out**: Purchase services from private sector as warranted by cost advantages.	Eliminate tuition subsidies at public institutions. **Demand-side subsidies:** Provide student loans and grants.	Mandate credentialing between sectors. **Insurance**: Provide UIC and welfare
5. Rationalize	**Direct Supply**: Produce services which can be efficiently delivered in public institutions. Withdraw from some markets.	**Regulations**: Regulate the private industry. Provide consumer information **Contracting-out**: Contract-out programs which are most efficiently delivered by private sector.	**Demand-side subsidies**: Reduce tuition subsidies. Give subsidies like student vouchers and loans and allow choice in venue of study. Provide higher subsidy for target groups.	Facilitate bridging between sectors. **Insurance**: Provide UIC and welfare

10.0 EVALUATION OF POLICY ALTERNATIVES

The five alternatives described in Chapter 9 offer a range of policy options which could be followed in an effort to improve the market for educational services in British Columbia. Each will have a different effect on the goal clusters identified in Chapter 8. In this chapter, we will evaluate these impacts to make recommendations about future policy directions. Additionally we will look at specific issues which require further elaboration.

10.1 Effect of Alternatives on Policy Goals

The effects of the five alternatives on the four goal clusters are listed below and summarized in Table 10.1.

Efficiency Goals: The **Equalize** and **Rationalize** alternatives will improve efficiency. Efficiencies in public institutions will improve as services are examined in a more competitive framework. An expansion of private supply, combined with consumer information and protection, will lead to a mix of programs more in line with employment needs.

Distributional Goals: In all alternatives except **Privatize**, government will maintain its efforts to increase participation by target groups. This can be done through supply-side incentives and demand-side subsidies, and in public or private sectors. The use of demand-side subsidies will be particularly effective in allowing government to achieve distributional objectives in the **Rationalize** alternative.

Budgetary Goals:. The **Privatize** alternative will also give significant budgetary improvements, but to the detriment of distributional goals. The **Rationalize** alternative gives more moderate budgetary improvements and still allows very effective distributional programs to exist. This alternative allows government to adjust subsidies to reflect both economic returns and equity distribution goals.

Political Goals: No alternative dominates in terms of improving the political situation. There are many conflicting interests, and various interest groups will support or oppose any set of policies. The **Privatize** and **Equalize** alternatives are likely to meet stiff opposition from organized labour, students, and from educators in the public sector. The economic impact on students (higher tuition) and a perceived reduction in job security among employees of public institutions may be seen as threats.

Table 10.1 summarizes the impacts of the five alternatives on the four goal clusters. More positive impacts are rated higher on a three-point scale: low (1 point), medium (2 points), and high (3 points). The status quo is taken as medium in all cases. The alternative with the highest total score will best meet the proposed goals.

Table 10.1 indicates that the preferred direction for government policy in post-secondary vocational education is the **Rationalize** alternative. The Equalize alternative gives the same overall rating, with efficiency improvements offset by failure to meet the political goals.

Table 10.1

Summary Of Impacts Of Alternatives

	EFFICIENCY GOALS	DISTRIBUTIONAL GOALS	BUDGETARY GOALS	POLITICAL FEASIBILITY	TOTAL SCORE
Status quo	medium (2)	medium (2)	medium (2)	medium (2)	8
Privatize	low (1)	low (1)	high (3)	low (1)	6
Private market with subsidies	medium (2)	medium (2)	medium (2)	low (1)	7
Equalize	high (3)	medium (2)	medium (2)	low (1)	8
Rationalize	**high (3)**	**high (3)**	**high (3)**	**medium (2)**	**11**

The remainder of this chapter will consist of two discussions regarding delivery options which may be implemented under the **Rationalize** alternative. This will assist in the formulation of recommendations to government. Section 10.2 will present a model for making decisions between the production and contracting-out options. Section 10.3 will examine the relative merits of contracting-out to non-profit and for-profit institutions within the private sector.

10.2 Should Government Produce or Contract-out?

As suggested in Section 6.3, government production of educational services has a positive impact on both efficiency and under-supply problems in the market. Why, then, would government consider contracting these services to non-governmental organizations? James and Rose-Ackerman (1986) suggest several reasons. Firstly, private organizations may be better able to charge fees for services, reducing

government's share of total costs. Secondly, private organizations may face lower costs than government institutions, especially for labour. Finally, government may simply be unable to provide the range of differentiated services demanded by policy makers (p. 30).

Many of the concerns that are addressed by direct production of a service (such as consumer protection and under-supply) may also be addressed in the contracting-out process. How, then, should government decide between these alternatives?

Globerman and Vining (1995, p. 1) set out a framework for this decision, based on efficiency arguments. They suggest that the objective should be to minimize the combined costs to government, the contracting supplier, and third-party citizens. These costs will include the costs of delivering the service and of monitoring performance.

Costs of contracting-out include bargaining costs (negotiating and changing the contract, monitoring, and resolving disputes), opportunism costs, and production costs. These costs are present to some extent in both government production and contracting-out options. Globerman and Vining suggest that production costs may be lower in private sector supply, but that increased bargaining and opportunism costs may offset any efficiency gains.

Globerman and Vining (1995, pp. 8-14) further suggest that the relative efficiency of the two options depends on three qualities of the service and the market: contestability, asset specificity, and task complexity.

1. A contestable market is relatively easy for firms to enter and leave. High contestability lowers the potential for opportunism and bargaining costs.
2. A specific asset is important to producing the outcome and has relatively low value in other uses. High asset specificity increases the chance that the party

that invests in the asset can be "held ransom" in future negotiations, and therefore raises the potential for opportunism and bargaining costs.

3. A complex task is open to uncertainty and information asymmetry. Highly complex tasks have great potential for opportunism and bargaining costs.

Vining and Weimer (1990) suggest the following maxim in the contracting-out decision:

> If, given public financing, supply is not contestable, then government should produce the good itself. If, given public financing, supply is perfectly contestable, then government should procure the good through contracting. (p. 5)

In summary, these suggestions about the supply/produce decision lead to the following guidelines:

1. Each supply/produce decision should be evaluated on its own merits. The goal should be to maximise net social benefits.

2. The costs to government, to contractors, and to third-parties should enter into the equation. Bargaining costs, opportunism costs and production costs should be considered.

3. A training program or related service should be evaluated on the basis of task complexity, contestability of the market, and the specificity of the assets required for production.

The analysis completed in this section indicates that contracting-out is a viable option for government in the provision of educational services, but offers no conclusive evidence of its effectiveness relative to direct production. The best choice of policy direction may vary with the type of education service to be delivered and with the field of employment for which the student is being prepared.

10.3 Merits of Non-profit and For-profit Sectors

In those cases where government decides that contracting-out is an appropriate course of action, it must still make a choice of training provider. The private sector includes organizations which operate with a profit motive and others which operate on a non-profit model. The non-profit organizational structure has a constraint: it has no owners who can appropriate any surplus of income over expenditures.

The presence of information asymmetry and the profit motive may tempt the for-profit organization to provide inferior service or to charge an excessive fee for service. There is a public perception that non-profits are less likely to take advantage of the consumer than profit-making firms. Since the principals cannot make any claim to financial residuals, they are expected not to take advantage of information asymmetry. This may lead decision-makers to favour the non-profit as the agent of choice. As Weimer and Vining say, "donors may 'trust' non-profits because they are not allowed to make a profit (Weimer and Vining 1992, p. 186).

James and Rose-Ackerman (1986, p. 90) point out that "nonprofits may operate precisely in those fields where positive externalities or monitoring problems exist ... in that case the profit-maximizing output (or quality) would be too low, and a nonprofit manager with a preference for such a good would move us closer to efficiency."

However, there are concerns about a lack of incentive for efficiency in non-profit organizations precisely because they do not distribute the monetary residuals (James and Rose-Ackerman 1986, p. 92). The manager may dissipate funds to excessive salaries and

benefits, fail to control inefficient activity, or cross-subsidize another organizational good which he or she prefers. Without monitoring, James and Rose-Ackerman (1986, p. 22) suggest, "shirking and waste may dominate, making the nonprofit form no more viable than the for-profit."

This is not to say that non-profit organizations do not have a part to play in the education system in British Columbia. Some non-profit organizations have expertise working with a specific client group (such as immigrant Canadians), and others perform a specialized training service (such as literacy upgrading). They may also draw on financial contributions of donors who wish to support their altruistic goals, allowing more activity to take place at a given government subsidy level.

10.4 International Experience

Comprehensive reform of a country's education system is not without precedent. Faris reports that most OECD countries are in the midst of reform. Scotland has been a pioneer in many reforms as it:

- introduced competency based, modularized vocational education in 1984;
- created a Scottish Vocational Education Council to develop, award and accredit vocational qualifications in 1985;
- reported that the vocational education drop-out rate fell from almost 20% in 1985-86 to about 7% in 1986-87; and
- recognized prior learning at Further Education College level as early as 1988 (Faris 1994, p. vii).

British Columbia can draw on the experience of other countries as it responds to the need for change

11.0 RECOMMENDATIONS AND CONCLUSIONS

The author recommends a set of policies intended to bring about a situation similar to **Alternative 5: Rationalize**. This alternative best meets the goals outlined in Chapter 8. Implementation will require a number of initiatives on the part of the Ministry of Skills, Training and Labour. To this end, several recommendations to the Ministry will be made in Section 11.1.

The author believes that there is a continuing role to be played by the federal government in post-secondary vocational education. This role stems from its responsibilities for employment and the Unemployment Insurance program, and for assisting groups specified in the Canadian constitution. Additionally, there are certain initiatives which require inter-provincial co-operation and a unified national approach. For these initiatives, federal co-ordination will be essential. Recommendations to the federal government will, therefore, be made in Section 11.2.

The author believes there is a continuing and substantial role to be played by the public education system in ensuring a range of training services which will meet the needs of employers and students. The co-operation and leadership of the public sector institutions and staff will be essential in the development of a comprehensive education system for British Columbia. Some related recommendations will be made in Section 11.3.

Finally, there are elements of the **Rationalize** alternative which indicate a significant expansion in the role of the private sector in the education system. These

opportunities will only come to fruition if there is a concerted effort within the industry to contribute in a socially sensitive manner. This does not preclude the opportunity to realize an appropriate return on investment for owners of private institutions, or for non-profit organizations to fulfil their wider mandates. Recommendations to the private sector are included in Section 11.4.

11.1 Recommendations to the Provincial Government

The Ministry of Skills, Training and Labour has a significant responsibility in ensuring that the education system in the province meets the needs of employers and provides efficient and accessible vocational training for British Columbians.

Recommendation 1: The Private Post-Secondary Education Commission should proceed with the accreditation of private training institutions as quickly as possible.

The pace of accreditation will be quite slow under the current implementation strategy. The use of voluntary accreditation teams, while keeping costs low, will lengthen the time needed to work through the backlog of applicants. The Ministry should subsidize the cost of paid accreditation teams during this transition period. There is a return to this investment. The cost of monitoring the performance of private contractors will be reduced once accreditation is in place. This will be a significant factor as contracting with the private sector is expected to increase in the **Rationalize** alternative.

Recommendation 2: The British Columbia Labour Force Development Board should examine the international experience with vocational education standards, credentialing, and recognition of prior learning. The Ministry should encourage adoption of a coherent plan for bridging between public and private institutions, and laddering between levels of competency.

The Ministry should encourage all training institutions to seek the economies inherent in the acceptance of the credentials of other institutions, both public and private. The experience of countries like Scotland in developing competency-based outcome measures should be examined. If this approach is recommended by the Commission, priority should be given to adapting an existing system rather than developing a new one.

Recommendation 3: The Ministry of Skills, Training and Labour should expand the mandate of the Open Learning Agency in developing a registry of skills and competencies.

The ability to give credit to the skills a learner already possesses will increase the efficiency of training programs and the system as a whole. A central registry will expedite the crediting of these skills by educational institutions, no matter where learning took place.

Recommendation 4: The Ministry of Skills, Training and Labour should develop a method of evaluating options for program delivery which is consistently applied to all providers.

The Ministry should make supply decisions based on efficiency considerations (as outlined in Sections 10.2 and 10.3), as well as on distributional goals. The objective

should be to choose the most efficient route to an effective training program, whether this be workplace-based, delivered in the public system, or contracted-out to private providers.

Recommendation 5: The Ministry of Skills, Training and Labour should develop a formula for evaluating training outcomes which considers the needs of special target groups as well as program costs and benefits.

On-going monitoring of performance should measure success of graduates as well as costs of programs. When equity target groups are served, or when an institution offers foundation education (ESL or literacy upgrading), the evaluation formula should be adjusted accordingly. The application of excessive outcome expectations will put valuable programs in jeopardy, at the expense of those most in need of assistance.

Recommendation 6: The Ministry of Skills, Training and Labour should develop a funding formula for public institutions which reduces the supply-side subsidy and increases the demand-side subsidy The Ministry should allow the consumer to use the demand-side subsidy at public and private institutions equally.

The choice of training option should be made by the consumer on the merits of the institution and program, rather than on an artificial imbalance in private costs. The use of vouchers or a similar tool will give the consumer the ability to base decisions on the effectiveness of the available options. Some degree of subsidy will remain at public institutions. Private institutions will need to provide a more efficient or relevant service to attract the consumer.

Recommendation 7: The Ministry of Skills, Training and Labour should develop a labour market information delivery system which facilitates the decision-making of consumers.

The ability of the consumer to make sound decisions about educational options will depend on good information about the labour market. This information needs to be easily accessible - perhaps through service kiosks located in public gathering places (malls, banks, government offices etc.). The Ministry should work with the Labour Market and Career Information Consortium to develop such a distribution system.

Recommendation 8: The Ministry of Skills, Training and Labour should invite business and labour to form sectoral councils to develop industry-specific standards for recognition of learning.

The input of employers will assure that the training programs in public and private sector institutions meet the needs of the labour market, and provide workers with the best chance at continuing employment.

11.2 Recommendations to the Federal Government

The federal government has performed an important role in developing and supporting the education system in British Columbia and across the country. There are still important functions for the Government of Canada to play in co-ordinating the system country-wide and internationally.

Recommendation 8: The federal government should continue to support training programs for Unemployment Insurance claimants as part of a strategy for their re-employment.

A national program will support mobility of workers in retraining for employment, and subsequent development of support networks for re-employment.

Recommendation 9: The federal government should support the efforts of provincial governments in stimulating the transferability of credits among the public and private institutions within their jurisdictions. The federal government should lead the development of similar portability of credits across the country.

The recommendations to the provincial government regarding the portability of training credits should be applied nationally. This is important to the mobility of skilled workers within the national labour force. This will also be critical to Canada's ability to compete in a global market for educational services.

Recommendation 10: The federal government should perform a role in the positioning of Canadian education and training services internationally.

Canadian educational institutions must be able to compete effectively in a global market for training. Free trade agreements and the development of electronic delivery methods will increase international competition. The federal government should facilitate unified standards and co-ordinated strategies for marketing Canada's educational system internationally.

11.3 Recommendations to the Public Institutions

The public education system has performed a great service to British Columbians in providing training to a rapidly growing and changing population, and in an ever-changing labour market. It is clear that, in today's fiscal climate, the system cannot be 'all things to all people'. There will be a continuing leadership role for the public institutions, but the citizens of this province would be well served by their co-operation with other training providers.

Recommendation 11: The public education system should continue to seek solutions to the rising costs of providing training for British Columbians.

The public institutions should co-operate with efforts to streamline education, adding their own expertise in assuring that quality is not overly compromised. The public institutions should provide efficient services and withdraw from market which are contestable, unless they are able to compete with other training providers.

Recommendation 12: The public education system should seek ways to accommodate the transfer of credits between each other and private institutions.

The public educators should take a leadership role in evaluating options for credentialing, recognition of prior learning, and competency-based outcomes, in an effort to develop a comprehensive and economical system.

11.4 Recommendations to the Private Training Industry

The private trainers in British Columbia have a great opportunity to make their industry a more significant player in post-secondary vocational education in the province. However, they must work together to overcome suspicions about their motivations in providing educational services.

Recommendation 13: The private training industry should co-operate with the Private Post-Secondary Education Commission to ensure consumer protection.

Accreditation will reduce the cost of monitoring the performance of private institutions The industry should proceed with accreditation as rapidly as is possible. Individual institutions should apply for accreditation quickly. Institution staff should volunteer their efforts as is deemed helpful by the Commission.

Recommendation 14: The private training industry should self-monitor to improve industry profile and reduce monitoring costs to government.

Each individual trainer should establish a 'Code of Ethics' or similar guideline and expect compliance from all staff. Voluntary associations, such as the Private Career Training Association should also establish codes of conduct which will form the basis of a common understanding of acceptable business behaviour.

Recommendation 15: Private trainers should establish links with employers to ensure the relevance of their training.

Large institutions should consider the establishment of employer councils to advise on the relevance of curricula. Smaller institutions should consider doing the same thing through their associations or in more informal groupings.

11.5 Conclusions

This paper advocates a new policy direction for the Government of British Columbia. The set of policies recommended is termed **Rationalize** and incorporates:

- a reduction of the level of supply-side subsidy at public institutions;
- a demand-side subsidy, such as student vouchers, which could be used at public or private institutions;
- a level of subsidy designed to reflect the distribution of economic returns;
- a targeted increase in the level of subsidy to achieve distributional objectives;
- student loans, insurance and welfare programs; and,
- formal recognition of credentials and prior learning across sectors.

In recognition of the complexity of the labour market, and the diversity of adult learning needs, this paper makes recommendations to both federal and provincial governments as well as to the public and private training providers. The co-ordinated efforts of all of these players will be necessary to meet the needs of employers and workers in the province.

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